Trucks haven't changed much in the past one hundred and twenty years.

Sure, they come wrapped in an assortment of rugged-looking sheet metal and stuffed full of features to keep your mind off the harsh ride, but if you were to strip all of that away, you would be left with the same basic structure. So, when **Honda** decided to build a truck for the 21st century, we used a lightweight unibody frame instead of the harsh-riding body-on-frame design needed only for heavy-duty towing. We also scrapped the live rear axle—a design that's been around since horses actually powered your ride. This makes the Ridgeline the only truck in the segment that **powers** over rough and uneven terrain with an independent rear suspension, which reduces how much the occupants inside get bounced around by allowing both sides of the suspension to operate on their own. Both of these features give the Ridgeline **2** composed driving experience no other truck can come close to. After all, who said rugged had to be rough?



We then took another giant leap away from truck tradition with the development of our available intelligent Variable Torque Management™ (i-VTM4®) all-wheel-drive system. You read that right: The Ridgeline is the only truck available with all-wheel drive rather than four-wheel drive. We didn't do this for the sake of simply being different. We wanted drivers to trust that each tire was performing exactly how it should be, given the kind of terrain it was driving over at all times. So instead of pulling a lever or pressing a button to engage all four tires, we designed the i-VTM4 with a system of wet clutches that constantly split torque between the wheels, sending up to seventy percent of the engine's power to the rear axle and then sending up to one hundred percent of that power to the left or right wheel, so it's available where it can be used best–instantly and seamlessly. All this makes the Ridgeline the greatest advancement in truck design since it all began, and it shows in every mile of every journey. This is how Honda does rugged.

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Backfires

The joyful noise of the commentariat, rebutted sporadically by Ed.

ORANGE CRUSH

Did you guys really have a Halloween-orange Ford Bronco in a dark parking lot full of spooky-looking cars or do we have Thomas Knoll to thank for your October cover?

> -Mike McDonald Kitchener, ON

It's the real deal-Ed.

NEWEST IN NEW

Noticeable omission in your showcase of 2021 cars ["New Cars for 2021," October 2020]: the redesigned Nissan Rogue. I am super excited about its upcoming release, and it was surely missed in your article.

> -Chad Sexton Knoxville, TN

Your excitement blinded you. Look again—Ed.

It seems Detroit automakers are as bereft of new ideas as Hollywood. Ford's big news is the Bronco, a reborn version of a 55-year-old SUV. GM is giving us the Trailblazer with a glorified snowmobile engine. And

the geniuses at Ram have installed a gas-guzzling Hell-cat engine in their pickup. It is just disappointing that the Detroit Three think they can continue to produce vehicles that are too big and of poor quality with no regard for anything other than profit. They will be left behind by smarter manufacturers.

-Stan Russell Renfrew, ON

Even if you're not inspired by the new stuff, your snowmobile-engine line is inspired-Ed.

THE THREE TOPS

After reading gripes from auto scribe doomsayers about how the CT4-V's use of the Silverado's four-banger marked the end of Cadillac's attempts to offer up proper sport sedans, I open my October issue to find that the CT4-V just knocked off an AMG A35 and M235i ["Lite Speed"]. Finally, 2020 has offered up a bizarre turn of events I can smile about.

-Chad Perry Fort McMurray, AB

DEAD OR ALIVE

I'm saddened to hear the Subaru BRZ/Toyota 86 is dead ["New Cars for 2021," October]. I own a manual version, and it's likely as close to a Porsche as I'll ever get, failing a thrilling old-age crime spree. It's not fast, but it lets me enjoy on-ramps and chicanes at legal speeds while connecting me with every bump, apex, and misshift possible. And while it's no 4x4, it gets me through every harsh Canadian winter! Why has Toyobaru killed this all-weather Miata? Is it just too far from the vanilla SUVs of the masses?

> −Jody S. Chalk River, ON

Don't panic; it's just dead for '21. It'll be redesigned and more powerful for '22-Ed.

In the review of the 2022 Audi A3, you state that new S3 and RS3 variants are inevitable ["Keeping Up with the Müllers," October 2020]. But under the list of expected changes for Audi

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Pick the winner that belongs in your garage.



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in the coming year, you list the S3/RS3 as dead. I'm confused. —Rich Whitman Castle Rock, CO

It's our way of telling you that Audi won't be selling a 2021 S3 and RS3, but they'll likely be back for 2022-Ed.

FRENCH KISSES

Regarding your comment on the French building a targa roof that would only work once ["Top Choice," October 2020]: The Peugeot 401 and 402 had electrically retractable metal roofs that worked very well. The French also build Bugattis. I put more than 100,000 miles on a Renault Le Car without any problem. And the Citroën DS19 was one of the most technically advanced cars in the late 1950s and worked very well. Are you part of the "liberty fries" era?

-Jean Pierre Vinkel Venice, FL

It must be the incredible quality that keeps French cars out of the U.S. They're just too good for us-Ed.

DINO-MITE KID

My six-year-old son and I enjoy reading your magazine together. But as a connoisseur of stupidly oversized/overpowered trucks and a lover of all things dinosaur, he was quick to point out that the velociraptor and the *Tyrannosaurus rex* lived during the late Cretaceous period, not the Jurassic ["The Real Power Wagon," October 2020].

-Marty Winstead Halifax, MA

Tell him he's right and that being an adult is tough. No one ever asks about your favorite dinosaur, you stop worrying about tripping over your shoelaces, and you almost never think about the threat of quicksand-Ed.

INSIDE THE BUBBLE

here's a lot of talk about bubbles these days. Who's in yours? Is there room in theirs? Is it possible to move one to the beach for a different view and warmer weather?

A few months ago, the *Car and Driver* staff had a

A few months ago, the *Car and Driver* staff had a chance to emerge from our bubbles and gather in Pinckney, Michigan, to test cars and trucks for our annual 10Best awards. It quickly became my favorite two weeks of 2020. We hadn't seen one another in ages. We hadn't gotten to compare notes in person or have the kinds of conversations and debates that spring up naturally in the office. It wasn't an NBA-style bubble, where everyone is tested and isolated from the rest of the world. But when you're inside the 10Best universe, it's easy to forget real-world issues, be they pandemic related or the prices of all the toys we're so lucky to drive.

We set a cap of \$90,000, the same as last year. The average as-tested price of the vehicles at 10Best came out to about \$57,000, well above what today's car buyers are spending. Yes, it was fun to loop country roads in those pricey vehicles, but it can also be distorting.

The average price of cars at 10Best is always above the average new-car transaction price because we're not just looking at mass-market vehicles. But today's car buyers are spending a lot of money and taking out longer and longer loans to finance their purchases. The average loan length has grown to 72 months, or six full years, according to Experian. This fall, Kelley Blue Book reported that the average transaction price of a new car was more than \$38,000, up from \$29,000 a decade ago.

That's a 31 percent increase, well outpacing inflation. There hasn't been a car with a base price below \$10,000 since 2006, and even then, the Chevy Aveo wasn't going to make it to the 10Best podium.

Given the economic uncertainty of our times, it would seem like good business sense to keep prices manageable for consumers. But the fact that prices just keep going up makes you wonder if we're in the middle of a sales bubble that may be about to burst.



IIC YOUR DOGS ON US AT: EDITORS®CARANDDRIVER.COM PHOTOGRAPH BY JENNY RISHER



Your vehicles crave approvals & specifications





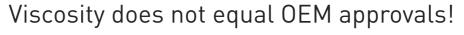












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A letter from a Johnie T. asked that we inform our readers that the Polestar 2 is made in China.

SUV PANIC

When Sharon Silke Carty announced *Car and Driver* was being renamed *SUV and Driver*, I literally shit myself ["Changes Afoot," October 2020]. Thankfully, I was on my reading throne, so there was no public humiliation, but you got me for a second.

-Anthony Thornton Broken Arrow, OK You're leaving some of us behind. I'll hang on while you feature seat-of-thepants, hold-your-attention sports cars. I hope you gain enough of the other type of "drivers" to sustain you. It's been fun, and some stuff has been hilarious.

> −Mac Gig Harbor, WA

Some stuff?-Ed.



What a mistake! Rebranding your magazine is dumping your history. If this is an example of the decision making of your new editor, I will soon be an ex-subscriber.

-Bill Snedden Internetville

Jokes are for the people who get them-Ed.

I subscribed to your magazine just a few months ago and am really enjoying it. I'm surprised by how some readers reacted to your GOAT issue and want to send a message of encouragement: Keep doing what you do. I couldn't imagine canceling a subscription just because I don't agree with something in the mag. Especially the comments about the new editor. I enjoy her column.

-Diego Torres Mississauga, Ontario

You're new here, so I'll let you know the cancellation threat is a long-standing thing; we even have a Miss Cancellation—Ed.

CULLI-MAN

So Rolls-Royce offers
44,000 colors ["Roll with
It," October 2020]. This is a
factoid that Ezra Dyer has
given all car guys to bring
out as a conversation killer.
Useful occasions include
fundraisers, parent-teacher
meetings, prospective-in-law
intros, and marketing proposals. Dyer, you rock.

-Marilyn Lott Front Royal, VA

SHARPEN UP

I loved Elana Scherr's column in the October issue ["The Thrill of the Dull"]. I worked for my family's used-car lot back in high school, and that often involved driving lots of different cars. All the Corollas, Camrys, and Civics I drove were very conducive to letting my mind wander. The GTI? Not so much.

-Curtis Trendler Provo, UT

I drive the epitome of "The Thrill of the Dull" in the form of a white single-cab reardrive Tacoma. It has absolute mechanical precision without the distraction of any notable ability whatsoever, thus providing quite a meditative driving experience.

-Tom Roller Broomfield, CO

ICEBREAKER

I was distraught when I read Honda was no longer offering a manual Accord ["Survival of the Funnest," October 2020]. But as I reflected on my experience purchasing one with the six-speed, my sense of betrayal waned, and I realized Honda's not to blame.

First, the closest dealership with a manual Accord was 100 miles away. When the salesman sent me a video of the car, he exclaimed, "Whoa, this thing's a manual! Not sure if you know that." He seemed shocked such a vehicle existed.

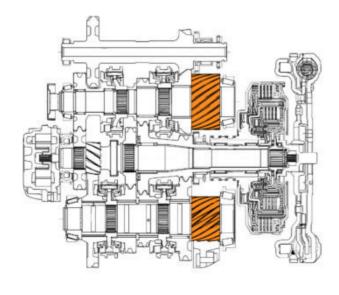
When I had it serviced, a

EXPLAINED

Recent comparos have shown cars as having two different final-drive ratios ["Lite Speed," October 2020, and "Cheap. Quick. Good," November 2020]. Assuming there are no great honking cast-iron transfer cases oozing fragrant final-drive lube on their unsuspecting owners' driveways, there has to be an interesting explanation for it.

-William Payne, Tucson, AZ

Front-drive transaxles are squeezed for space in the narrow area between the engine and front wheels. To make the trans more compact, the internals of manual and dual-clutch transmissions are packaged in such a way as to have two paths and thus different gears to drive the differential. The steps between the overall ratios—the product of the individual gear and the final-drive ratio—are similar to what they'd be with a single final drive, so there's no real difference between a transmission with two final-drive ratios and a transmission with one from behind the wheel. Illustrated here is a VW dual-clutch. The two gears highlighted in orange drive the differential (not shown). The larger gear on top is the longer of the two final-drive ratios. —*K.C. Colwell*



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Buying cars online is changing the game, but some dealers still insist on the benefits of the old way.

30-something "technician" came to pick up the car. He entered the car, and he sat. Then he drove away in his dealer car. When I asked why he left without my car, he said: "I didn't know it was a stick. I have to send someone else to get it." Someone else did pick up the car—the service manager, whose husband, I learned, doesn't know how to drive a manual.

I think the Accord is the finest combination of style, reliability, comfort, utility, safety, driver enjoyment, and cost of ownership. But the manual makes it truly special, and without it, I would not have considered it. I know the automatic Accord is quicker, but I couldn't give one and a half bowel movements about that. A manual makes a car fun at any speed. Every shift is entertainment. Not many will miss the manual, but for the few who do, it will be missed dearly. I know of nothing that can replace it. -Joel Mehling

Seeing good ol' Walt Lazar Chevrolet mentioned brought back memories. My brother and I would ride our bikes up there to look at new Corvettes and Camaros.

> -Michael Roy Dearborn Heights, MI

Valparaiso, IN

It was a super superdealer-Ed.

MORE QUESTIONS

The same day I read your prediction that it would most

likely be five years before we see a sub-2.0-second car ["20 Questions for 2021," October 2020], Elon Musk announces the Model S Plaid. Of course, it could still be five years before it shows up.

> -Josh Buchanan Pelham, AL

So, five years and 1.9 seconds to 60-Ed.

Kudos, Ed., on the inclusion of the 6000 SUX in the future-car-shape piece. While the odds aren't great on that sweet 8.2-mpg beauty coming anytime soon, I'd buy that for a dollar! Will you publish me? It's your move, creep. I've got to go; somewhere, there is a crime happening.

-Jamie Mack OCP ED-209 Compliance Officer Kansas City, MO

My friends call me . . . -Ed.

Regarding the worst and banned clichés in automotive journalism, you forgot "bespoke."

> -James Reid Toledo, OH

I remember David E. describing the switchgear in a 1969 BMW as operating with the precision of a Purdey shotgun. Worked for him.

-Steve Deering San Rafael, CA

We will call no cliché before its time-Ed.

How many readers got the rendering of one Nigel Tufnel

rowing through an 11-speed automatic on page 14?

-Dan Jakel Grand Rapids, MI

I got a chuckle when I saw the illustration of Nigel Tufnel, complete with skeletal shirt. Brilliant. There's such a fine line between stupid and clever.

> -Steve DiLorenzo New York, NY

Bob Ross makes me happy.
Thank you for including him.
—Sam Blockhan
Redmond, WA

In the piece about the 3-D-printing revolution, you write, "In the latest test, a crash at 35 mph showed a 253 percent reduction in the g-force spike and attenuation compared with a 25-mph crash test performed 18 months earlier." I get that a 100 percent reduction would mean that the g-force spike was completely eliminated, but I cannot even imagine what it would mean to go to a 253 percent reduction.

-Bob Woolley Asheville, NC

Local Motors claims a
253 percent improvement
in energy dissipation; we
erroneously swapped in
the word "reduction" and

attributed it to the g-force spike, which makes for an impossible and confusing situation—Ed.

THE

LIGHTEN

MENT

ΕN

In your piece about the limits of acceleration, you talk about "graying out" during launch. You're confusing longitudinal g's with the vertical g's that airplane pilots feel when blood is drawn down out of the head. Since most drivers recline their seatbacks to some extent, they would tend to "red out."

-Charlie Swindells Cottonwood Heights, UT

You got us, but did you know that passing out from laughing gas is called fishing out?-Ed.

END NOTES

I have a complaint [Go on-Ed.]. As I begin reading the magazine, I reflexively look for the renewal notice tucked between the pages so I can use it as a page marker. But it's no longer inserted. What's going on? Are you trying to save paper?

-Ronald Podolsky Levittown, NY

Podolsky, you're the only person I know of who likes the blow-in cards.
That's what they're called.
See, Dyer isn't the only one with factoids-Ed.



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Within a week of Ghosn's daring escape, Mercedes unveiled an electric concept vehicle based on the 2009 science-fiction movie *Avatar*, a film about a mining colony attempting to wipe out an indigenous species and its culture. But before that settled into our consciousness, we heard rumblings that GM was bringing back the Hummer as an electric vehicle. The company eventually unveiled it in October, deftly making the transition to battery power while still capturing the weird excesses of America with a vehicle that's more likely to plow through a tree than hug it. A Watts to Freedom mode—as close as GM marketers will get to typing "WTF"—launches the electric Hummer to 60 mph in a claimed 3.0 seconds.

Ford took a moment (and a picture) to share that the frunk of its upcoming electric Mustang Mach-E would be a great place to lay out a shrimp cocktail spread on a bed of ice while tailgating. Try doing that in your Shelby GT500, knuckle draggers! That was in February, which

meant it was likely the last time many of us thought about hanging out with friends around a vat of shellfish before COVID-19 started shuttering factories in Asia. The pandemic spread across the globe and shut down entire economies and borders and took a heavy toll on human lives. Auto sales briefly tanked and then bounced back with surprising strength and speed, even as millions of Americans traded their commutes for working from their couches.

Oil prices fell. Then fell again. They eventually dropped below zero dollars. For a few days, oil was worth less than worthless. Meanwhile, in response to the coronavirus, nearly every automaker became a medical-equipment provider (or at least tried) as factories switched from producing vehicles to making ventilators and masks. Elon Musk did his part by declaring Tesla an essential business and keeping its Fremont, California, factory running until authorities stepped in. Product launches and development programs were pushed back, but we're aware of only one vehicu-

2020 BY THE NUMBERS

Reservations for the Ford Bronco in the U.S. and Canada

190,000+

47.8%

MARKET SHARE OF DOMESTIC
AUTOMAKERS IN APRIL, THE HIGHEST
PEAK SINCE SEPTEMBER 2006

80,000
NUMBER OF
VENTILATORS
PRODUCED BY
FORD AND GM

8.6%

PEAK RISE IN USED-CAR PRICES DURING THE CORONAVIRUS PANDEMIC COST OF AUTOMOTIVE PRODUCTION
LOST TO COVID-19 FACTORY
SHUTDOWNS IN NORTH AMERICA

\$107 BILLION

\$38,723

Average new-vehicle price in September 2020, up 2.5% from a year earlier

14.4 million

Projected U.S. new-vehicle sales in 2020, down from 17.1 million in 2019 lar casualty of the pandemic: Lincoln had announced in January it would be partnering with EV startup Rivian for an upcoming vehicle. By April, it had walked back those plans, leaving us with whiplash. We had just published a story on the electric Lincoln in

our 25 Cars Worth Waiting For issue. Guess it's 24 cars worth waiting for, then.

If you lived in the state of Georgia in May, you may have noticed your roads got a little bit more hectic when the state allowed nearly 20,000 kids to get their driver's licenses without taking a road test. No less horrifying, a parade of imbeciles with more money and time than sense and compassion took advantage of shelter-in-place orders and nearly empty roads to chase new Cannonball Run records.

Speaking of having more money than sense, EV startup Nikola went public, raised a ton of cash, then entered into a deal with GM, wherein the Detroit automaker will build its hydrogen powertrains and electric pickup in exchange for equity. Almost immediately after the agreement made headlines, Nikola's CEO and founder resigned amid allegations that the company misled investors. The stock tanked. It turns out the deal hadn't been finalized yet, but as of press time, GM is still at the table for reasons that not even GM can explain.

Because there wasn't enough turmoil in the U.S. auto market already, in August, Ford pulled a C-suite switcheroo, replacing its top Jim—CEO Jim Hackett—with another—Jim Farley, the noted car-guy exec and cousin of deceased comedian Chris Farley. Hackett had only been in the top spot for a little over three years. He had replaced Mark Fields, who helmed the Blue Oval for less than three years. If Farley can make it to the four-year mark, his story will be as triumphant as *Tommy Boy*.

The weirdness hit close to home, too. Many of us have become super into vans and RVs because we all want to leave our houses and flying with strangers seems like a big no-no. Forty-two years after this publication set up shop in Michigan, we've discovered new driving roads less than an hour from the office. We've seen the insides of our co-workers' houses, even as we rarely see our co-workers in person. It all makes a disgraced CEO's desperate escape to freedom seem utterly ordinary. **-Roberto Baldwin**

THE YEAR IN TWEETS ACCORDING TO

Elon Musk

Carlos Gone · January 1

A Tesla works as a boat for short periods of time, as an electric car has no air intake or exhaust to block & battery/motor/electronics are water-sealed. Submarines are just underwater EVs. • January 25

Just wrote a song called "Don't doubt yer vibe" • January 30

The coronavirus panic is dumb • March 6

Coachella should postpone itself until it stops sucking • March 10

Based on current trends, probably close to zero new cases [of coronavirus] in US too by end of April • March 19

We have extra FDA-approved ventilators. Will ship to hospitals worldwide within Tesla delivery regions. Device & shipping cost are free. Only requirement is that the vents are needed immediately for patients, not stored in a warehouse. Please me or @Tesla know. • March 31

I am selling almost all physical possessions. Will own no house.
• May 1

Tesla stock price is too high imo • May 1

Tesla is restarting production today against Alameda County rules. I will be on the line with everyone else. If anyone is arrested, I ask that it only be me. • May 11

Tesla Model S now first ever electric vehicle to receive EPA range rating above 400 miles! • June 15

SEC, three letter acronym, middle word is Elon's • July 2

Please trash me on Wikipedia, I'm begging you • August 16

Tunnels under cities with self-driving electric cars will feel like warp drive First operational tunnel under Vegas almost done The @BoringCompany • September 15

The gauntlet has been thrown down!
The prophecy will be fulfilled.
Model S price changes to \$69,420 tonight! • October 14

Am getting wildly different results from different labs, but most likely I have a moderate case of covid. My symptoms are that of a minor cold, which is no surprise, since a coronavirus is a type of cold.

· November 14





Winners and Losers: Testing Edition

A retrospective on 2020 through the eyes and instruments of our testing team.



Winner: Porsche 911 Turbo S

Just when we thought production cars had reached a plateau in straight-line performance, we tested a car that nearly nipped the 2015 Porsche 918 Spyder for the quickest 60-mph time we've ever measured. We guess we shouldn't be surprised that the 640-hp missile that (almost) did it was also from Porsche. The 992-generation 911 Turbo S missed tying the 918's 2.1-second sprint to 60 mph by just a tenth of a second. We're guessing that record will fall soon, though automakers will have to work on more than just increasing launch traction if they plan to supplant the 918's quartermile record of 9.7 seconds. The Turbo S is 0.4 second behind in that metric.

Losers: GM Full-Size SUVs

No one would ever call the Yukon, Tahoe, Suburban, or Escalade a handling icon, but we had some hope that body-on-frame dynamics would reach new heights this year with GM's adoption of an independent rear suspension for its full-size SUVs. But that optimism quickly turned to confusion when we initially couldn't surpass 0.40 g on the skidpad in any of them. To beat that poor showing, we engaged low range, a mode where most 4x4s completely disable



stability control. While that worked to get us into the 0.70s on the skidpad, engaging the short gears in the transfer case on paved roads won't do the half-shafts any favors. When we asked GM why the stability control is so intrusive, we got a very diplomatic response: "The stability controls on GM's full-size SUVs are developed to ensure safe vehicle operation for a wide range of driving conditions and driver inputs. The dynamic performance of these SUVs meets or exceeds requirements associated with applicable government regulations." We suspect it's to protect an engine-oiling weakness, as a massive cloud of smoke trailed every one of these brutes after each lap of the skidpad.



♦ Winner: Porsche Taycan Turbo S

The Teslarati were faced with indisputable evidence that an electric car exists that does something better than the X, 3, Y, and S models from their beloved Silicon Valley automaker. You see, as an EV's battery depletes, the car's performance inevitably suffers. But Porsche's Taycan Turbo S minimizes that performance degradation better than any Tesla we've tested. After 15 consecutive acceleration runs, the Taycan Turbo S's 10.5-second quarter-mile time slipped just 0.9 second whereas the Model S Performance tacked 4.5 seconds onto its time. Did Porsche figure out how to make negatively charged ions lighter, like gas burning off in a fuel tank?



♦ Loser: Tesla Model S Performance

Not to pile on, but during those acceleration runs we just mentioned, the Model S Performance's 60-mph time more than doubled, reaching 7.0 seconds on the sixth run. A few months later, Tesla addressed this issue with the Cheetah software update, which not only shaved a tenth off the Model S's 60-mph time, to a Taycan Turbo S-matching 2.4 seconds, but also made it so the Tesla could run 15 back-to-back runs with every pass under 4.0 seconds.

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→ Winners: Hyundai Sonata Hybrid and Ioniq Electric

Of the 83 hydrocarbonburning cars we subjected to our 75-mph highway fuel-economy test this year, the Hyundai Sonata Hybrid traveled farthest on one gallon of fuel. Its 51-mpg score is impressive, but almost nearly as impressive is the sporty Honda Civic Si sedan's 41-mpg result in the same test. Hyundai also took top honors in the gallon-of-gas-equivalent category, with the Ioniq Electric netting 127 MPGe during its run.



♦ Loser: BMW M440i xDrive

BMW continues to amaze in ways we wish it didn't. The company used to make some of the world's best sports sedans and coupes. Used to. But when we rolled the newest, nostriliest M440i xDrive onto the scales, we did a double take: The readout showed 53.8 percent of this car's nearly two-ton mass was positioned over the front axle. This certainly contributed to the M440i's poor 0.91-g skid-pad result, the worst we've ever achieved in a Michelin Pilot Sport 4S-shod car. What happened to all that 50/50-weight-distribution talk, BMW?



Winner: Nissan Frontier

In the most unlikely of upsets, the 120-mph Nissan Frontier will outrun a Ram 1500 TRX, given the road is flat and the race is long enough that the Nissan can exploit the Ram's 2-mph top-speed deficit. It's an SAT question in the making, but by our calculation, the 310-hp Frontier needs six minutes, 28 seconds to make up the 1000-foot lead the 702-hp Ram gains during acceleration. That's about a 12.5-mile drag race. It could happen, although Nissan says it won't, as the Frontier we tested was a preproduction model, and the automaker tells us customer Frontiers will be limited to 112 mph. Bummer. There goes Nissan's bid at the 2021 Dakar Rally.



→ Biggest Loser: SSC

In October, American supercar maker SSC claimed a new production-car top-speed record of 316 mph with its 1750-hp Tuatara. The video documenting this feat quickly drew internet fire because the elapsed time between known points on the chosen road didn't align with the claimed speeds. We asked SSC why it didn't use an established player in GPS data logging, such as Racelogic, to verify the results, and it told us, "We were going at speeds that aren't standard automobile speeds, and [we] had wanted more of an aerospace-level validation system." That's weird, because our VBox 3i data loggers are certified to 1000 mph, and we peddle an \$8 magazine, not sevenfigure cars. Julian Thomas, Racelogic's founder, scraped SSC's video frame by frame and, comparing the elapsed time with visual landmarks, computed a peak of 224 mph. That's almost a Ram TRX's top speed away from the 331-mph max shown on screen. SSC vows to make another attempt with third-party witnesses. If the record stands, we can move on to debating whether SSC is a production-car manufacturer. (It isn't.) -K.C. Colwell



ON FUMES

California Dreamin'

America's largest car market plans to ban the sale of new gas-powered vehicles in 2035. Is it crazy or prescient?

On September 23, with a devastating wildfire season as the backdrop, California Governor Gavin Newsom signed an executive order banning the sale of new combustion-powered passenger vehicles in the state by 2035. That means no new gas engines and no new diesels.

Newsom's order now goes to the powerful California Air Resources Board (CARB), which will hold hearings before writing the regulations. For those of us with gasoline running through our veins, the order might look like sugar poured in the engine's fuel tank. But this isn't the finger that knocks over the first domino. It is a single domino in the middle of a chain that's already toppling. Falling battery prices, growing concern over the effects of climate change, and surg-

ing demand for EVs in Europe and Asia are fueling the internal-combustion engine's decline.

The major players in the global auto industry readily acknowledge that millions of vehicles will shift from having combustion engines to battery power during the 2020s. It's the only viable, scalable way to slash the well-to-wheel carbon emissions from on-road vehicles. Before Newsom signed his order, 16 of 26 major auto-parts suppliers surveyed by engineering consultancy Ricardo said meeting mandates for 100 percent zero-emission vehicles (ZEVs) by 2035 or 2040 was achievable with existing technology. And some want to go even bigger. Fourteen said they would back such a target nationwide. In October, Oregon Senator Jeff Merkley and California Representative Mike Levin introduced a federal bill to do just that, though it is not likely to reach a vote anytime soon.

The auto industry is in near universal agreement that the future is electric. The disagreements largely focus on timing: Will people start to adopt ZEVs en masse within a couple of years or not until 2040? California is betting that technological advances, automaker investments, and consumer acceptance will propel EVs toward the



Newsom announced the ban in front of EVs from Audi, Ford, Honda, and Tesla, signaling implicit endorsement from those brands. tipping point sooner than later. The pool of potential EV buyers is set to grow as new models arrive in the mid-size-crossover and full-size-pickup segments in the next three years. And with battery costs falling faster than anyone predicted in 2010, carmakers

say they see a path to selling electric vehicles with ranges of more than 200 miles that, crucially, make money. The Volkswagen Group claims the batteries in its newest EVs cost less than \$100 per kilowatt-hour of capacity, an oft-cited target for profitability. And GM president Mark Reuss says every model built on the company's new Ultium electric-vehicle architecture will make money, starting with the GMC Hummer EV in late 2021. (Some analysts remain skeptical.)

Once the EV world becomes profitable to more than just Tesla (which currently relies on the sale of regulatory credits to other manufacturers to be in the black), carmakers will start to market these vehicles pervasively and competently—something they've utterly failed to do to date. That means touting EVs' inherent benefits, including strong acceleration, calm and quiet powertrains, and a "full tank" every morning. Ken Morris, GM's vice president of electric and autonomous programs, said in November that the company sees "an inflection point" in the mid-2020s when "customer adoption will increase rapidly."

This goal of ending the sale of new cars that emit greenhouse gases isn't unique to California. Norway was among the first to make it official policy, targeting the year 2025, **V1 for 2025 is here!**

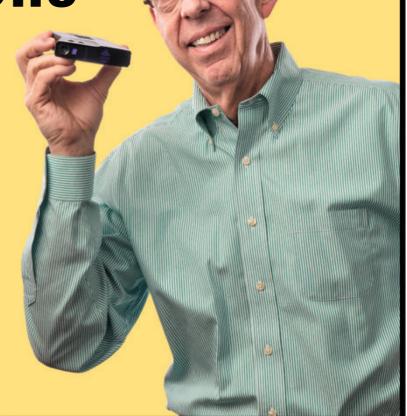
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Generation 2

It's about range superiority. I told my engineers, 'We want the best radarseeking engine this side of the military.'

In fact, we adapted a concept from military CHIRP radars used to find fainter targets farther away with higher precision; it's a SAW Dispersive Delay Line, SAW D²L. For civilian users, V1 Gen2 is a breakthrough on range."

— Mike Valentine





This is V1 reengineered for 2025:

- Much longer range, yet fewer false alarms.
- All-new and patented circuitry, SAW D²L powered.
- LNA technology on all bands.
- Built-in Bluetooth[®] smartphone connection.
- All-new high-contrast display.
- V1's legendary Radar Locator and Bogey Counter, back by popular demand.

We call it V1 Gen2. You'll love it.

V1 Gen2 brings new detection tools

New LNA technology: The only way to extend range is to detect ever weaker signals. Think of LNA as a signal magnifier.

LNA has another benefit—it acts as a one-way valve, trapping LO output before it escapes V1 Gen2's magnesium case. That's the key to stealth. V1 Gen2 is practically undetectable.

New, and patented, SAW D²L: Detecting more radars adds exponentially to data flow. SAW D2L jumps the processing rate more than a hundred times, enabling V1 Gen2 to quickly sort speed-trap radar signals from today's glut of lane-change and crash-prevention radars.

Range superiority

LNA's faint-signal acquisition feeding the high-rate analysis of SAW D2L adds up to a breakthrough in radar early warning. The range increase on Ka band is especially dramatic. Our new K-Verifier weeds out unwanted K alerts.

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Radar

ahead





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and other countries have put forth their own cutoff years, ranging from 2030 to 2050 [see "Fueling Down"]. The biggest dog in this fight is China, where people bought more plug-in vehicles in 2019 than the rest of the world combined. China's government said in 2017 that it plans to end the sale of new combustion-engine vehicles at some point to be specified later. The country intends to dominate global electric-car production the way it now dominates the solar-cell and lithium-ion-battery industries.

And within our borders, California is not alone in the fight for a cleaner atmosphere. Thirteen other states and Washington, D.C., already follow CARB's more stringent vehicle-emission rules, and some of them—New York, New Jersey, and Washington—are now assessing similar combustion-vehicle bans. These states make up a powerful bloc in pushing the industry toward lower emissions. California accounts for roughly 11 percent of U.S. new-vehicle sales, and the entire CARB-following group represents roughly a third of the market.

There are reasons to think California won't achieve a total ban on new combustion-powered vehicles come 2035, though. For the vision to become a reality, Newsom's order will have to survive the inevitable lawsuits and possible interference from future presidential administrations. And

even then, if history is any guide, just because California says automakers must sell ZEVs doesn't mean that consumers will buy them.

CARB penned its first ZEV mandate in 1990, calling for 10 percent of new vehicles sold in California to be powered by battery-electric, plug-in-hybrid, or hydrogen fuelcell tech by the 2003 model year. But for nearly as long as CARB has been setting zealous goals, the state has also had to adjust them to reflect reality. The regulations have been repeatedly pushed back and watered down as a lack of consumer demand and expensive, immature technology made initial targets impossible to hit. Through the first three quarters of the year, electric vehicles made up 6.1 percent of new-car sales in California.

While we don't know how CARB will enact the 2035 combustion-engine ban, the logical path would expand the current mandate, which plateaus in 2025 with large manufacturers obtaining credits that represent ZEVs making up between 4 and 29 percent of their annual sales. (That wide spread reflects that, under today's rules, every EV sold can earn between 0.55 and four ZEV credits, depending on range and charging capability. Credits can also be bought and sold among automakers.) But if EV sales don't take off on their own, can the state really

push manufacturers and consumers up the steep ramp from 6 percent today to 100 percent in 15 years?

Reacting to the 2035 ban, the Alliance for Automotive Innovation (AAI), a carmaker lobbying group, observed, "Neither mandates nor bans build successful markets . . . [and] much more needs to be done to increase consumer demand." It called for offering more incentive programs and expanding EV infrastructure. Under the Joe Biden presidency, the AAI is likely to see those wishes fulfilled. Biden has promised to put \$400 billion toward cleanenergy projects, including the creation of 500,000 new charging stations by 2030 and the expansion of the federal income-tax credits for EV purchases.

In the end, whether California achieves its ban on gasoline and diesel engines or merely pushes ZEV adoption further may be irrelevant. The implicit purpose of the policy is to move the goal posts—to nudge automakers to offer more compelling electric vehicles with more variety sooner. It exists to accelerate the inevitable transition to battery power, which it is all but guaranteed to do. —John Voelcker

JANUARY 2021 ~ CAR AND DRIVER

FUELING DOWN

Countries around the globe have laid out long-term plans to eliminate gas and diesel vehicles from their roads. Many intend to accomplish this by banning the registration or sale of new vehicles fitted with internal-combustion engines. The map below shows where and when such bans are slated to commence. Several countries—Austria, China, Denmark, Egypt, Germany, India, and Taiwan—have proposed similar bans, but due to legal challenges, backpedaling, and/or general ambiguity, we have decided not to include them. —Colin Beresford



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Trends to End

Three aftermarket fads that are dumb and bad.



I don't like to sneer at anyone's enthusiasms. For the most part, whatever you want to do to your car is fine by me. Cover it in stickers. Jack it up or slam it to the ground. Get yourself some underbody lighting and truck nuts, if that's your bliss. But there are a few trends that deserve derision.

THE CAROLINA SQUAT: Because of its name, I assume this is a regional phenomenon, like vinegar-based barbecue sauce and secession. To give your truck the Carolina Squat, you install a lift kit on the front end but leave the rear end stock (or maybe even lower it). That's it. Now your truck looks like it was dropped off a five-story building with 10,000 pounds of bricks in the bed.

My friend Keith used to run an off-road shop, so I asked him whether anyone ever wanted him to build a truck that way. "Hell, I lost a lot of customers to that," he said. "I'd tell them, 'We warranty our work, and I'm not buying you ball joints and control-arm bushings. And it's not safe; your headlights can't aim down that far, and frankly, Tom Cruise, your short ass can't see over the hood.' It jacks up the camber and makes trucks drink fuel. Plus, it looks stupid. I call them squatters and poopers." One time, Keith installed a complete lift kit on a guy's truck, and the owner removed the rear blocks afterward. Then he subsequently broke a spindle and brought the truck back to Keith, at which point, I assume, he was ridiculed into the next state.

EMPTY ROOF BASKETS: In college, I had ski racks on my raggedy 1987 Jeep Cherokee (two-door Laredo, 4.0-liter, five-speed, thanks for asking) but only—get this—in the winter. In the summer, I removed the ski racks. It was easy! They just unscrewed from the crossbars. And I bet you can do the same thing with your YakiThuleRhino rack. In fact, I know you can because my neighbor has a Roofnest tent on his Toyota Highlander but only sometimes. I'm assuming he puts it up there when he expects to use it and then takes it off when he's done rather than drive around at all times with a small house on his roof.

Just admit your roof basket isn't really for carrying things. It's for telling the world that you have so much stuff and go on so many adventures with a carful of all your cool friends that your Subaru wears a metal hat just in case you spontaneously set off on a whitewater rafting trip, which is the kind of thing you do. There's nothing inherently wrong with roof baskets, but leaving them up there all the time is like wearing crampons to Walmart.

FURRY STEERING-WHEEL COVERS: This trend involves taking a plush toilet-seat cover from the 1980s and wrapping it around your steering wheel. Why would you do this? Because you're in high school and your frontal lobe isn't yet fully developed.

To assess the appeal of this, I borrowed a crazy red one that belongs to my niece. She's 17 and her car's steering wheel resembles a Tickle Me Elmo that got stuck in a centrifuge. I've told her that it's dangerous and makes her car look like Pennywise the clown is bursting forth from her steering column, but suffice it to say, my opinions on coolness are not highly valued by Gen Z.

Anyway, I wrapped this Muppet pelt around the wheel of a Cadillac XT6 and hit the road. And the furry cover actually

isn't bad. It's way beyond bad. For one thing, the ugh rug makes the XT6's precise steering feel like you just swapped in the rack from a 1947 Mack garbage truck—whatever information was coming through the wheel is smothered under a yard of writhing polyester fibers. And that terrible textile itself squirms around on the wheel, adding another layer of interference. It's so huge it obscures the instrument cluster, so you accidentally leave the turn signal on because the indicator light is blocked by Animal's mop. But at least, to anyone who saw me, I looked like a really smart guy who has it together.

I mean, I modded my car when I was in high school, but my accessories were timeless. Now if you'll excuse me, I've got some ultrasonic deer repellers and smoked headlight covers to install.





A Line in the Sand

Learning to make good decisions during a day in the dunes with a dog.



Zip-full name: Zippity-Doo-Dog-is one of those outdoorsy dogs. The kind that is never on a leash because he has important dog stuff to do, like sniffing for rabbits, and leashes are for city dogs who wouldn't know a rabbit hole from a burrito wrapper. Outdoorsy dogs spend their days riding along in work trucks or, in the case of Zip, on the console of a 2020 Jeep Gladiator towing a 2006 Wrangler. They are working dogs. When I met Zip, his job was to teach me to drive in sand dunes.

Technically, it was John Marshall, owner of Coyote Land Tours, whose job it was to teach me how to drive in the dunes, but the second I met Zip (who begrudgingly let me scratch his ears), I knew he was the one I needed to impress. Zip and Marshall met me at a diner in Moab, Utah, because it's the kind of town where nothing gets done until everyone has had some coffee and eggs. Also, Marshall finds he can do a better job with his students if he gets a feel for their goals over pancakes rather than at the terrifying crevasses he's about to instruct them through. He's been leading off-road tours in Moab since 2002 and offering one-on-one (or group) instruction since 2003. He's helped experts become more expert, taught retirees how to use their newly purchased 4x4s, and coached countless tourists in rented Jeeps.

My goal was to conquer sweeping mounds of sand, with their treacherous drops and deep, tricky bowls. Dunes are the most romantic off-road challenge, where a skilled pilot acts more as a dancer than a driver, riding the sand like a hawk on the wind. Dunes are also scary.

Even the vocabulary is intimidating, all "witch's eyes" and "razorbacks." I was worried I couldn't do it.

"It's like surfing," Marshall said. "Do you surf?" I shook my head. "Skateboard?" I looked blank. Zip, I swear to you, rolled his eyes. He was not any more impressed when I got the Wrangler stuck one-third of the way up the smallest dune. Marshall was more patient, talking me through the process of backing down and partially up the previous dune, using gravity to get the big tires moving and then laying into the throttle to keep them going. "Put some heat into it," he said as I let the revs drop. Slowly, I started to see the rhythm of it. A dune is not a racetrack with one or two fast lines and a bunch of space for mistakes; it's all potential lines and all potential mistakes.

Marshall quickly realized that I did better with a destination than with turn-by-turn instructions and started giving me challenges. "Get us to that tree two miles over that way." "Find us a path to that far dune with the big shadow on it." "Take us to the riverbed." "Now go back to where I parked the truck when we started." Ah, yeah, where was that? Oh yes, by the big rock formation that looks like a Jell-O salad.

When we got to the truck, we ate Italian wraps on the tailgate of the Gladiator, and while I won Zip over with cheese and salami, Marshall told me stories of big-city tourists, or as he calls them, front-country people. Once, someone asked him if all the rocks were painted. Another if the sun always set over the same canyon. One lady stepped on a small rock and was concerned when it wobbled. She asked Marshall if there wasn't someone he should call to fix

it. "I was like, 'What, like a maintenance guy who will hot-glue it down and make it safe?'"

The outdoors isn't about being safe, Marshall said. It's about being reminded to pay attention to your own fragility and discover your own strength to solve problems. "I can't teach you to make good decisions," he said, "but I can teach you how to recognize a bad one." Then he pointed to the park entrance, many miles away on a cliff top. "Meet you there," he said and called Zip, who ignored him to chase a possible rabbit. "Just start driving," he said. A few minutes down the trail, he radioed over: "Slow down and open your door." I looked back and saw Zip running along the trail past Marshall's vehicle to me. I opened the door and he leapt into my lap, then settled down on the console. I scratched his ears, and we headed out of the wilderness, each content that we had made a good decision.



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The name says it all. Our annual 10Best awards cut through the crowded market of more than 300 cars, trucks, SUVs, and vans to find the 10 that live up to their purpose while delivering incredible value and a great driving experience. These are the

10Best for 2021.

By the Editors Photography by Marc Urbano

f you're anything like us, your bank account balance doesn't have nearly enough commas to make your dream garage a reality. Reconciling your hobbies with life's responsibilities doesn't have to mean driving something boring, though. Think of our 10Best winners as enthusiast picks for regular people. This year's winners include three vehicles with starting prices under \$30,000, a full-size truck, a three-row family hauler, and the best deal among luxury autos. We've got sports cars, too, of course—three of 'em.

Our process for picking the 10Best is simple. We start with a price cap of \$90,000 and invite the most promising vehicles that are new or significantly changed since last year's competition. We also bring back the previous year's winners to defend their titles. Any newcomer that wants to run with the best is going to have to be better than at least one vehicle that made the cut in 2020.

For two weeks, we tested and evaluated 57 contenders, focusing on their value, fun, and mission fulfillment. The 10 that took home trophies live up to these ideals better than anything else right now. If you're in the market for a new vehicle, this list is your starting point. Stick to it and you're guaranteed to take home a winner.

TOWER OF HORSEPOWER

They sell cars out of vending machines now-sort of. Online used-car retailer Carvana has built 27 "car vending machines" around the country like the one in our pictures. Most of the company's customers take delivery of their vehicles at home after completing the online transaction, but those who live near one of the glass towers have the option to pick up their purchase. Buyers receive an oversized novelty coin to activate the vending machine, which dispenses the vehicle in a moment that feels considerably more special than buying a bag of stale Cheetos. Since Carvana sells only used vehicles, you'll need to wait a year or two before you can take delivery of this year's 10Best winners from one of its vending machines.

Expert Opinion

The highlights, the low points, and everything in between, as recorded in our editors' notebooks.



Acura TLX

Low cowl, wide hood, great forward view, and satisfyingly firm around the driving loop. Just needs the Type S's summer tires.



Audi A6 Allroad

Not trying to be as sporty as the Mercedes-Benz E450 All-Terrain and better for it.



BMW 228i Gran Coupe

Possesses none of the ride-andhandling balance that helped make the BMW brand.



BMW M235i xDrive Gran Coupe

Sullies the good name of the rear-wheel-drive 2-series coupe. Feels very frontdrive when you lean on it. And there's nothing M about it.

28





BMW M440i xDrive

What a sweet and massively strong inline-six, but the CT5-V is more well rounded.



Cadillac CT4

This car proves that you can impart a huge amount of premium feel just through a stiff structure and good chassis tuning.

Cadillac CT4-V

The haters will complain that this isn't a real V car. Forget the badge—and them; it's a real sports sedan.



Cadillac CT5-V

Enjoyable to drive not because of its raw capabilities but because of its organic feel.



Cadillac Escalade/ESV

It has taken five generations for GM to properly differentiate the Escalade from its other full-size SUVs. This one finally gets it right.



n some alternate universe, golf clubs and targa tops don't exist and the 2021 Chevrolet Corvette is 174.4 inches long. That happens to be the length of the Audi R8, a car that is about eight inches shorter than the Corvette. But Corvette buyers love Pings and they love removable roof panels, so the C8 has a big ol' trunk behind its mid-mounted V-8. It looks weird from certain angles. Not as weird as a stretch Lincoln MKT but also not as tidy as it might have been. Maybe GM should've hired some of the people who used to build secret cargo compartments into Trabants headed to West Berlin.

And that's about it for our beefs with the Corvette, which is a performance value for all time. Its 2.8-second 60-mph time slots neatly between the Ferrari 488 Pista's 2.7-second sprint and the Porsche 911 Carrera S's 2.9-sec-

ond run, yet its \$59,995 base price aligns with those of half-ton pickups and tarted-up Jeep Wranglers. And this isn't a case where there's a headline-grabbing value model that rolls on four space-saver spares and has an interior made of soggy cardboard. We'd probably grab the \$5995 Z51 performance package, but you don't need it to secure the Corvette's essential promise of outrageous speed and exotic mid-engine extroversion. Even the interior, long a Corvette afterthought, is well wrought in any trim, with supportive seats and expensive-looking switchgear.

We always expect Corvettes to be 99th-percentile quick, but this one also offers a degree of refinement and versatility that surprises us. With a control-arm suspension front and rear, the C8 provides a compliant ride while retaining the ability to slav your favorite set of corners. The base model's specially developed Michelin Pilot Sport All Season 4 ZP tires won't turn to Teflon in cold weather. The eightspeed dual-clutch can quietly slur its shifts in automatic mode or crack off tire-barking upshifts and perfect rev-matched downshifts in manual mode. And the active exhaust is demure at part throttle but unleashes a high-decibel bellow when you put your foot down. This is a supercar that can handle a 100-mile commute. It's also a coupe that's a part-time convertible: Flip three latches and the targa roof pops off. Or leave the roof in place and you can fit two sets of golf clubs in the back. Can't do that in an R8. —Ezra Dyer

~ THE NUMBERS

490- or 495-hp 6.2-liter V-8, 8-speed dual-clutch automatic

Base: \$59,995-\$73,490

C/D Test Results (Z51 Coupe)
60 mph: 2.8 sec
1/4-Mile: 11.2 sec @ 122 mph
Top Speed (mfr's claim): 184 mph
Braking, 70-0 mph: 149 ft
Roadholding, 300-ft Skidpad: 1.03 g
EPA Comb/City/Hwy:
19/15/27 mpg





n four short years of existence, Genesis has now won two 10Best awards. Clearly, the brand has our attention, even if the general public has no clue what to make of it. Like the other Genesis models, the GV80 has a not-so-subtle winged badge on its nose. If passersby confuse those wings with Bentley's Flying B, so be it.

It shouldn't be surprising that Genesis found inspiration in Bentley. After all, the Hyundai Group employs former Bentley design chief Luc Donckerwolke, and while styling is subjective, it doesn't feel

The GV80's design and presence

only add to the ruse.

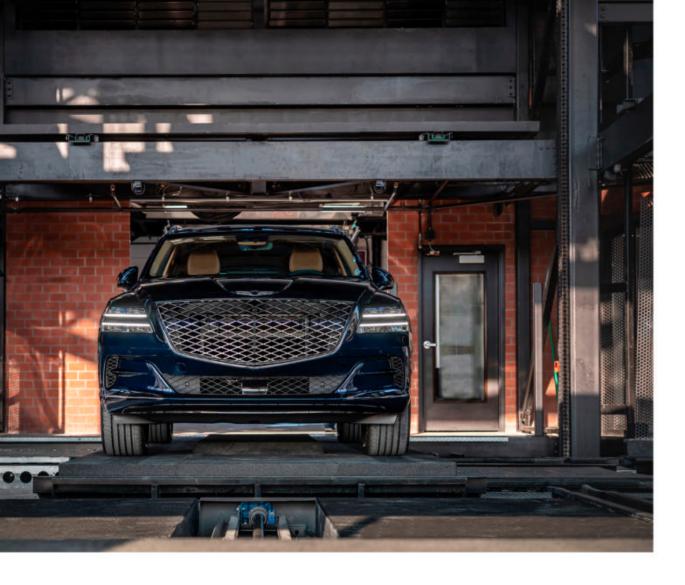
like much of a stretch to say that the GV80 is more attractive than a Bentley Bentayga.

If you're thinking, "Well, anyone can rent a tuxedo," the GV80 has real substance beneath its sheetmetal. Under the skin is Genesis's new substantial-feeling M3 platform—yep, that's what they call it. Solid and quiet, the crossover has a multilink setup on both axles. The handling and steering are crisp and carlike. There's a lack of stress, even when you exceed the tires' limits. The GV80 drives lower than it is, the body remains flat, and its weight is distributed such that no single tire seems over-

truly intoxicating. The ride quality blends relaxation with athleticism, and the twin-turbocharged 3.5liter V-6—the upgrade engine pick—never raises its voice too loudly, although you can adjust the volume of the engine noise piped into the cabin. This 375-hp six offers up 391 pound-feet of torque just off idle, which means the powertrain is never out of step; a heady surge of acceleration is just a toe dip away. There's also a 300hp turbocharged 2.5-liter inlinefour in the lineup, and aside from exhibiting a touch of lag when accelerating from a stop, it pulls with authority and does its work without making much of a fuss.

Double-pane front glass and active noise cancellation help block out the world, but at highway speeds, there is a bit more tire roar than expected. It's possible that all the Bentley cues may have raised our expectations into the superluxury sphere. To the sound-level meter, there's no difference: The GV80's low 66-decibel hum at 70 mph is right there with the Bentley

32



Flying Spur's. But while the volume level is identical, the sound itself is not as pleasant.

Inside, Genesis piles on the luxury, with carefully stitched patterns on the seats, a big 14.5-inch infotainment screen, available soft leathers and handsome woods, an audio system that's better than the one in your house, the ability to use your smartphone as a key, and even thick carpet to give your shoes some love. The uncluttered instrument panel is close enough for contact but visually distant—a clever design trick. Set in front of the driver on the top-tier model is a 12.3-inch digital gauge cluster. All other trim levels have a smaller screen with a digital tach and analog speedo. On every GV80, though, the tachometer needle swings counterclockwise, possibly a nod to the way Aston Martin does it.

Amid the exquisiteness are just a couple minor missteps. The gear selector and the rotary control for the infotainment system are easily mistaken for each other. Swapping their placement would help avoid confusion. The two-spoke steering wheel that looks sort of like a '74 Chevy's has an unbecoming bit of plastic trim on its top side. Finally, buyers who option the

third row should consider it a temporary position and know that the extra seats rob the GV80 of a spare tire.

We drive many new vehicles where it's obvious the designers and engineers benchmarked only direct competitors. That strategy can produce good cars, but it almost never produces breakout ones. Inspiration for the GV80 clearly came from Bentley and Rolls-Royce. Of course, the GV80 isn't a superluxury SUV, but it's not a cheap knockoff, either. Its design and refinement allow it to sing many of the same notes as vehicles twice its price.

Aiming high and pricing low—the GV80 starts below \$50,000—is how you get noticed. That's how Lexus and Acura did it over 30 years ago; now it's Genesis's turn. —*Tony Quiroga*

~ THE NUMBERS

300-hp turbo 2.5-liter inline-4, 375-hp twin-turbo 3.5-liter V-6; 8-speed automatic **Base:** \$49,925-\$60,175

C/D Test Results (3.5T AWD) 60 mph: 5.3 sec @ 101 mph **1/4-Mile:** 13.9 sec

Top Speed (mfr's claim): 149 mph Braking, 70-0 mph: 170 ft Roadholding,300-ft Skidpad: 0.82 g

EPA Comb/City/Hwy: 20-23/18-21/23-25 mpg

Expert Opinion



Chevrolet Suburban

Third-row space is on par with that of minivans, the gold standard of people movers.



Chevrolet Tahoe

Mostly refined, but you'll feel a lot of steeringcolumn and structural shake on the road.



Chevrolet Trailblazer els cheap, bw

Feels cheap, but at \$32K, it isn't.



Chrysler Pacifica AWD

Pillows? Why are there pillows in the back seat?

The pillows are fantastic!

Chrysler understands that kids are going to beat each other silly with these pillows, right?



Dodge Charger SRT Hellcat Redeye Widebody

A loud reminder there's more to life than just horsepower.

hen people ask their neighborhood car expert (that's you) which car to buy, they usually have an answer in mind and are just looking for confirmation that it's the right one. It rarely is. So don't be surprised if your neighbor's cousin's stepbrother's eyes don't light up when you tell him to buy a Honda Accord. We should know. We've been beating the Accord drum for ages: This represents its 35th 10Best victory.

For many of those years, the Accord was—rightfully—one of the most popular cars in the U.S. It has slipped in the ranks lately, but that has nothing to do with the quality of the product because the Accord is as good as it has ever been. It's a reasonably priced, generously sized four-door that offers the refinement of a luxury car, the precise moves of an upmarket sedan, and the sensibility of, well, a Honda. What more could you want?

The bulk of new-car buyers these days want a tall perch, plastic body cladding, and the false sense of security allwheel drive provides, none of which you'll find here. But we don't miss those frivolities when there's such a breadth of Accords on offer: the \$25,725 LX for a low monthly payment, the 48-mpg hybrid that's far more appealing than any Prius, and the 252-hp 2.0T for sub-6.0-second sprints to 60 mph. Even a fully loaded Accord, which is as well equipped as many BMWs and Audis, is \$37,655. That's less than the average price of a new vehicle.

But now that we think about it, there is actually one more thing we want. For the first time ever, a manual transmission is no longer part of the lineup. As if to prove that the stick-shift Accord doesn't matter as much as we thought it did, Honda stopped building it in 2019 and didn't tell anyone. We didn't notice until months after the fact.

But the reason we liked the manual in the first place was because it enhanced an already great package. The Accord is so good—with or without a stick—that we still think one should be parked in just about every driveway in America. —Joey Capparella

~ THE NUMBERS

192-hp turbo 1.5-liter inline-4, 181-hp AC motor + 143-hp 2.0-liter inline-4 (212 hp combined), 252-hp turbo 2.0-liter inline-4; 10-speed automatic, continuously variable automatic, direct-drive Base: \$25,725-\$32,865 C/D Test Results **60 mph:** 5.4-7.0 sec 1/4-Mile: 14.0-15.4 sec **Top Speed:** 115-126 mph Braking, 70-0 mph: 170-189 ft Roadholding, 300-ft Skidpad: 0.83-0.88 g EPA Comb/City/Hwy: 26-48/22-48/32-48 mpg





TELLI I

n specs alone, you wouldn't guess that the Kia Telluride is 10Best material. It's a family SUV of normal size with normal power and a normal price. But then you climb in and say, "This costs less than \$50,000? How?" One tester

pointed out that between the Telluride and the Cadillac Escalade (base price \$77,490), only one offers ventilated second-row seats—and it's not the Escalade.

But the Telluride's appeal goes deeper than its 10-yardlong equipment list. The big Kia is a pleasure to drive, with the 3.8-liter V-6 churning out smooth power and its quick responses belying its proletarian 291 horsepower. The ride is sedate and the body control taut, erring toward sportiness. We can also say, based on our long-termer, that this Kia is blissfully free of reliability foibles that might squelch our enthusiasm. And when equipped with all-wheel drive, the Telluride is even pretty adept off-road thanks to a button on the center console that locks the front-to-rear torque distribution at 50/50.

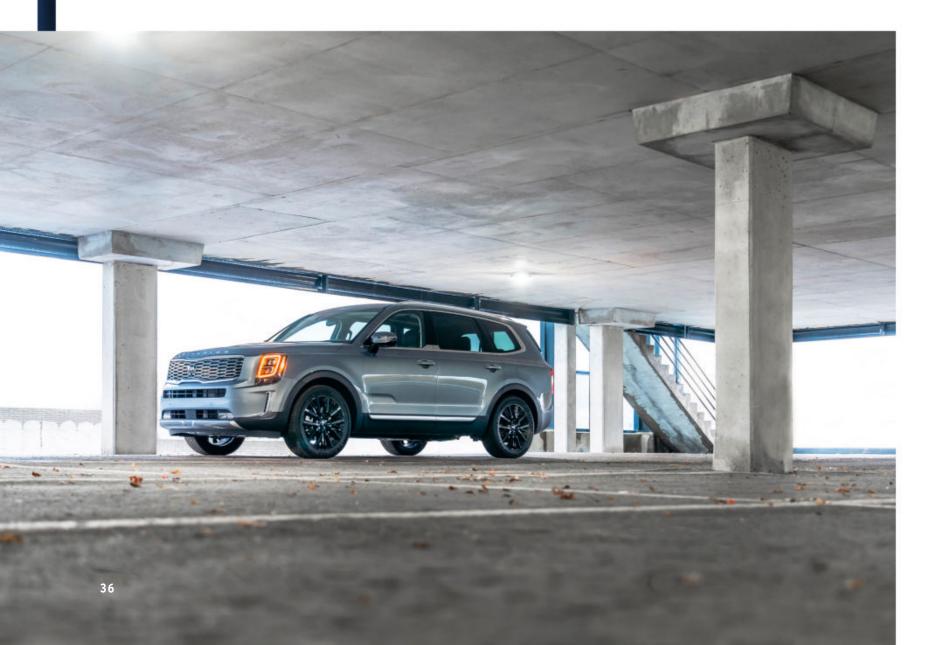
Out on a trail or the road, this SUV is better than it needs to be. That description comes up a lot with the Telluride. The styling, the interior quality, the value—it's all the handiwork of a com-

pany that knows its badge is, at best, a neutral factor in the purchase decision. So the vehicle has to be really good. In the case of the Telluride, you get the experience of a luxury SUV without any pretense or badgesnob affectation. It's inconspicuous consumption perfected.

Of course, Kia would probably love it if its brand had more clout. And someday it will, if it keeps building vehicles like this. In the meantime, we're enjoying this interstitial period, when Kia is on a hellbent mission to earn respect and knows exactly what it needs to do to get it. Drive a Telluride and you'll see what we mean. —*ED*

~ THE NUMBERS

291-hp 3.8-liter V-6, 8-speed automatic Base: \$33,160-\$35,160 *C/D* Test Results (AWD) 60 mph: 6.9 sec 1/4-Mile: 15.3 sec @ 93 mph Top Speed: 132 mph Braking, 70-0 mph: 177 ft Roadholding, 300-ft Skidpad: 0.82 g EPA Comb/City/Hwy: 21-23/19-20/24-26 mpg





Dodge Durango SRT Hellcat

It's not just about the engine; SRT sure made this big SUV dance, too.



Ford Mustang Shelby GT500

No magazine story or YouTube video can convey the ferocity of this car. Awesomeness, thy name is GT500.



Genesis G80

A budget luxury liner with an interior as sumptuous as those of cars costing 20 grand more.

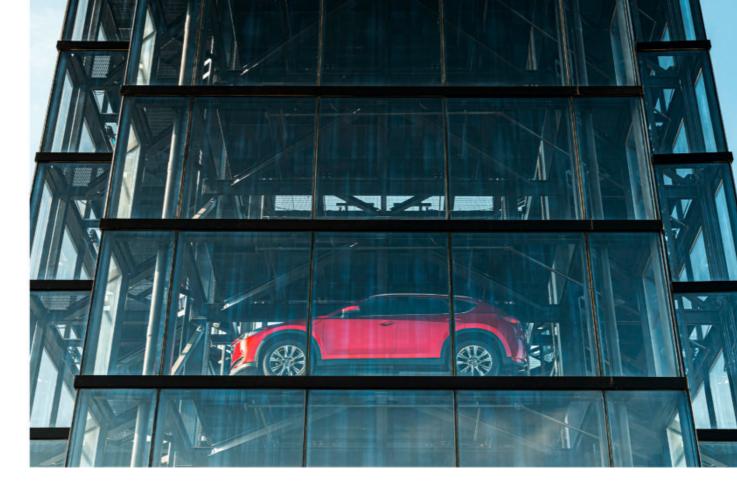


GMC Yukon

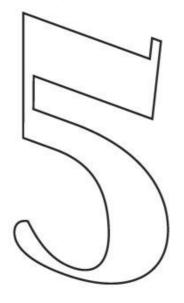
This is the sweet spot in GM's fullsize-SUV lineup where luxury and value meet.



Hyundai Sonata Doesn't drive nearly as refined as it looks.



CX-CX-ZDA



erhaps you're
wondering how a
compact crossover
like the Mazda CX-5 lands
on a list of our favorites.
After all, this publication
frequently derides and
mocks the CX-5's dull
segment. While our values are often at odds with
what's happening in the
small-crossover world, we
recognize that a growing

number of drivers want to sit high in a practical all-wheel-drive vehicle with an attractive price. The CX-5 fits that bill, but it is a 10Best winner because this Mazda is full of the reasons that we love cars.

The CX-5's sharp styling, handsome interior, and rich paint are visible differentiators in this class, but the driving experience is what elevates it. Mazda set up the CX-5 to drive like a premium brand's sports sedan. Bend into a corner and the steering gives satisfying feedback that's aligned with the firmness of the suspension. Lithe and responsive, this crossover comes alive through its controls. The brakes grab as though they were tuned by the same engineer who did the MX-5 Miata's. While most competitors employ a CVT that surges with rubbery imprecision or a slushbox with more gears than sense, the CX-5's six-speed automatic never finds itself out of step.

A turbocharged engine with 250 horsepower is on offer, should you want to

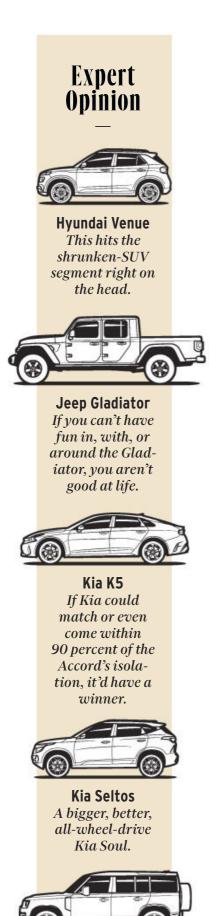
emphasize the "sport" in sport-ute with a 6.1-second run to 60 mph. The base 187-hp engine won't set the world afire, but its power delivery is crisp and smooth, two adjectives that elude competitors.

In a segment that doesn't always share our values, the genius of the CX-5 is that it transcends its kind. It's imbued with the feel of a performance vehicle, but it's also practical, refined, and thoughtfully designed. Even the indifferent will notice the difference. Like all 10Best winners, this Mazda opens eyes and gets people to say, "Whoa. So this is why you're into cars." —*TQ*

~ THE NUMBERS

187-hp 2.5-liter inline-4, 250-hp turbo 2.5-liter inline-4; 6-speed automatic Base: \$26,370-\$33,160 *C/D* Test Results (AWD) 60 mph: 6.1-7.9 sec 1/4-Mile: 14.6-16.2 sec Top Speed: 124-130 mph Braking, 70-0 mph: 169-175 ft Roadholding, 300-ft Skidpad: 0.78-0.82 g EPA Comb/City/Hwy: 24-28/22-25/27-31 mpg

10Best for 2021



o drive a Porsche Boxster or Cayman is to experience the pinnacle of connectedness between driver, car, and road. It is to feel a level of confidence behind the wheel that few cars can impart. It is to know how pleasurable and engaging the sheer act of driving can be. Year after year, Porsche has refined these mid-engine two-seaters, and in one form or another, they've now earned 22 10Best wins since 1998.

Consider just some of the praise we heaped upon them in the past two years. We called the 300-hp Cayman T the perfect starter Porsche and declared: "For some people, it might be the perfect Porsche, period . . . In a digital world, the T feels and drives like its steering "perfectly weighted and incredibly precise" and said the Cayman and Boxster achieve "massive cornering speeds with great control." Of the 394-hp GTS 4.0, we wrote: "It would be easy

to fill pages with moon-eyed poetry praising the intoxicating zing of the new 718 GTS's 4.0-liter flat-six engine. Oh, the noises it makes hunting down the glory of 7800 rpm, all the while electrifying scalps, tingling spines, and purpling prose." And we summed up our feelings about Porsche's 718 lineup this way: "If there's an automotive engineer active today developing anything—anything, any model, any type of vehicle—who hasn't driven a 718, then that person doesn't really understand what good is."

Full disclosure: That last statement was inspired by our drive of the lineup's hottest track star, the Cayman GT4, which is ineligible for 10Best because its \$101,550 base ask crests above our price cap. But every Cayman and Boxster shares that same genetic makeup, that same joyous driving character, that same feeling of being alive in your hands.

They also share Porsche's rich pricing, complicating which models make this year's 10Best list. On the Cayman side, it's the base coupe, T, S, and GTS 4.0. For the more expensive Boxster range, the base roadster, T, and S qualify. The Boxster GTS 4.0 stickers \$250 too high to be 10Best eligible. But you know how we feel about it.

Those prices might make it difficult for you to find a spot for a Boxster or Cayman in your garage. But every enthusiast owes it to himself or herself to finagle a way to get behind the wheel of one these brilliant sports cars, if only for a short drive. Just so that you, too, can really understand what good is. —Rich Ceppos

~ THE NUMBERS

300-hp turbo 2.0-liter flat-4, 350-hp

turbo 2.5-liter flat-4, 394-hp 4.0-liter flat-6; 6-speed manual, 7-speed dual-clutch automatic Base: Boxster, \$63,350-\$75,350; Cayman, \$61,250-\$88,150 C/D Test Results (Cayman T) **60 mph:** 3.8-4.4 sec 1/4-Mile: 12.3-12.8 sec Top Speed (mfr's claim): 170 mph Braking, 70-0 mph: 142-149 ft Roadholding, 300-ft Skidpad: 1.01-1.04 g **EPA Comb/City/Hwy** (excludes Cayman GTS 4.0): 21-24/19-21/24-27 mpg

an analog machine." We also called

Land Rover

Defender

Someone should

show this to

Jeep as proof that

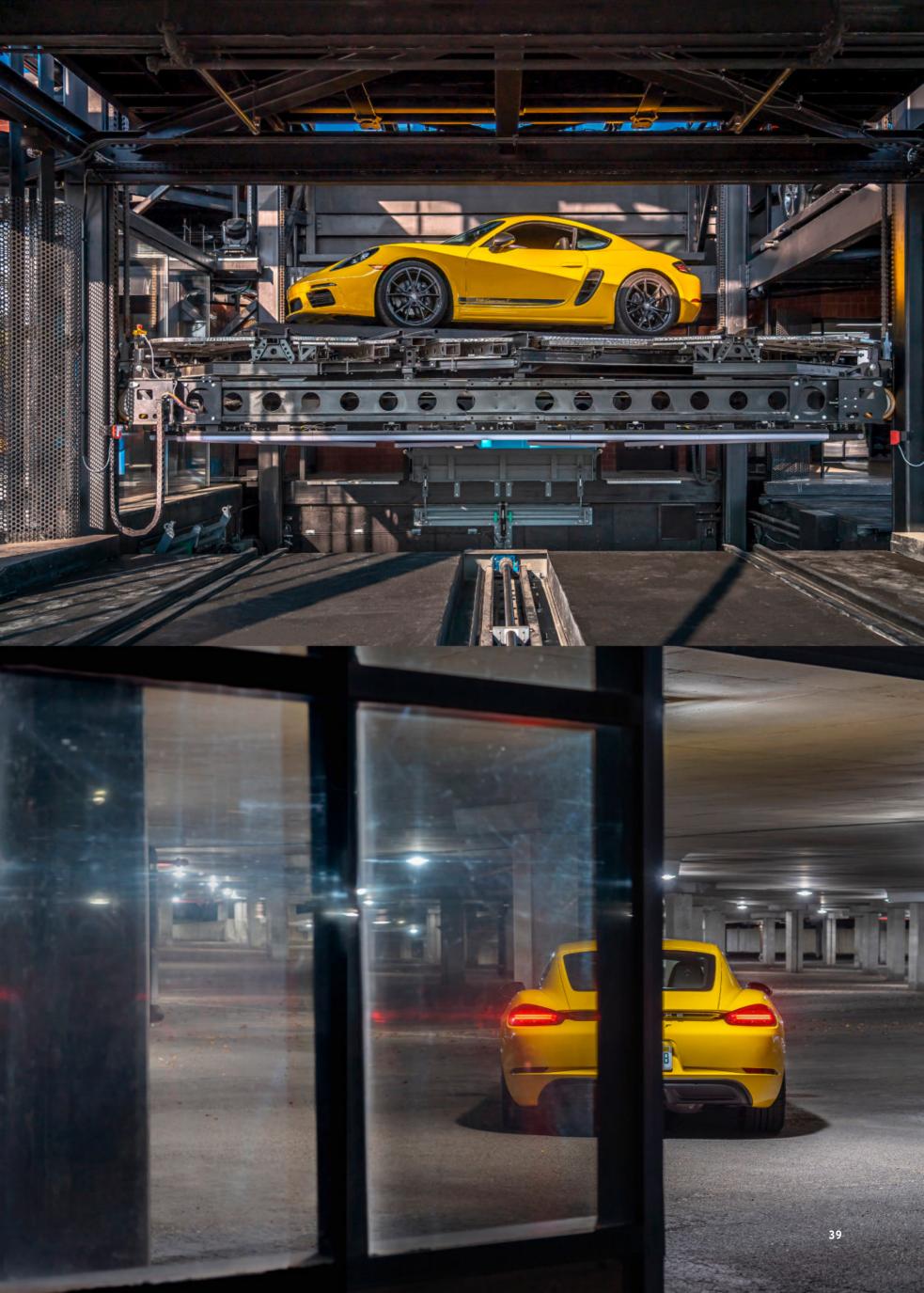
you don't have

to punish your

customers for

wanting to go

off-road.





ou should know that the Porsche Macan shares . some of its components with humbler and cheaper models from elsewhere in the Volkswagen Group. You should know this not because it matters but because friends and casual acquaintances are likely to share this information in the belief it makes the Macan

less of a Porsche and anyone who buys one less of a judge of cars.

You know better, though. If you're not looking for a lowslung sports car, this is the pick of Porsche's range, even if it is currently the oldest member of the clan. In engineering, as in highend hash slinging, the finest chefs can turn even humble ingredients into truly sublime creations.

While the Macan looks like an SUV, it doesn't drive like one. Smaller and more agile than the Cayenne, it can be hustled like an oversized hot hatch. You sit higher from the ground, but the Macan corners with a deftness and adjustability completely at odds with its shape and stance, resisting understeer about as well as anything with an engine up front thanks both to its huge traction and its willingness to play.

As in previous years, the Macan's 10Best award is restricted to the V-6 models, all of which use turbocharged engines shared with other Porsche and Audi vehicles. The list now includes the newly arrived 375-hp GTS, which occu-

~ THE NUMBERS

348-hp turbo 3.0-liter V-6, 375- or 434-hp twin-turbo 2.9-liter V-6; 7-speed dual-clutch automatic

Base: \$61,550-\$85,950 C/D Test Results 60 mph: 3.5-4.6 sec 1/4-Mile: 12.2-13.2 sec

Top Speed (mfr's claim): 157-167 mph Braking, 70-0 mph: 155-163 ft Roadholding,

300-ft Skidpad: 0.93-0.94 g **EPA Comb/City/Hwy:**

19-20/17-18/21-23 mpg

pies the narrow niche between the 348-hp Macan S and 434-hp Macan Turbo. The GTS is our pick of the range due to its combination of sonorous performance, a pliant ride, and steering that gets amazingly close to the feel and precision of Porsche's sports cars. We took the GTS to a racetrack during 10Best testing—the only SUV to make that cut—and were charmed that it's not just competent but every bit as entertaining as the two-door 10Best winners. This rare spread of talents means that one Macan can effectively turn your single-car garage into a multihorse stable. —Mike Duff

Trends from the Contenders

1. LOOK, MA, NO FEET!

Are today's drivers really as infirm as automakers imagine? Carmakers have been steadily removing the need to know how to change a tire or shift a manual. Now, more and more vehicles don't even require the driver to exert the strength to keep a foot on the brake pedal through a red light. Auto brake hold, which maintains brake pressure after the vehicle is stopped, is an evolution of hill hold, but instead of engaging only on inclines or declines, auto hold activates every time the vehicle comes to rest. FCA is the only major automaker not offering the feature in at least some of its vehicles in the U.S. The underlying technology is the same that's used for features such as stability control, automated emergency braking, and adaptive cruise control: a hydraulic unit that can build and maintain brake pressure without a foot on the pedal. The system smoothly releases the pressure when the driver toes back into the accelerator. And if the zombie at the wheel fails to drive off in a set amount of time, an electronic parking brake steps in to hold the vehicle indefinitely. —Dave VanderWerp

2. HOSTILE TAKEOVER

Time was, if you were looking for a new car on a slim budget, you'd end up with something in the Toyota Corolla class. These days, you have more choices thanks to automakers' investment in subcompact crossovers. These small utes, such as the Chevrolet Trailblazer and Kia Seltos, are popping up all over the place like kudzu in the South, poised to take over the entire field. Most arrived to the market in the last five years or so, and already they nearly match small cars in number, with 32 subcompact crossovers on sale today versus 35 small cars. And automakers-especially the domestic brandsare killing off their compacts left and right. The good news? The small cars that continue to survive-Honda Civic, Volkswagen Golf GTI and Jetta GLI, to name a few-are some of our favorites. - Annie White

3. REMOVING THE NEEDLE

The proliferation of digital gauge clusters is starting to feel more like an invasion than an innovation. More often than not, this tech unnecessarily complicates the instrument interface, making us long for easier-to-read analog gauges. The worst—we're looking at you, Jaguar Land Rover—merely mimic their old mechanical setups with uninspired visuals and limited info despite the blank canvas. We've rebuked BMW for its bizarre boomerang-shaped gauges. And Porsche's clusters don't dim enough, causing eye strain at night. There are some figurative bright spots, though. Audi's Virtual Cockpit displays are versatile and beautifully rendered. And systems with configurable screens that change with each drive mode—as in the Ford Mustang—offer something analog gauges can't. —Eric Stafford

Expert Opinion



Lexus IS350

A naturally aspirated V-6 just doesn't get it done in this segment anymore.



Mazda CX-30

Much more in the realm of Audi and BMW than Chevy and Toyota.



Mercedes-AMG A35 4Matic

The upscale interior makes it seem worth the \$52K price; its harsh ride does not.



Mercedes-Benz E450 All-Terrain

"All-Terrain"? On these summer tires? Surely you can't be serious.



Mercedes-Benz GLA250 4Matic

One of the most improved models versus its predecessor, but it's still not particularly special.

RAIS 00

how us a vehicle that does it all and we'll show you a vehicle that's compromised in everything it does. That's the story of most modern full-size pickup trucks, which play a role that's part family SUV, part com-

mercial vehicle, part luxury car, and part circus strongman. Sure, your truck tows an impressive 10,000 pounds, but chances are it rides like a tractor, especially with a bed full of nothing but air.

The Ram 1500 can't entirely escape these trade-offs, but it balances and minimizes them better than any truck on the market. Thanks in large part to the coil springs (or optional air springs) at each corner, the Ram rolls over broken pavement with exceptional civility. It goes down the road feeling more like a Mercedes-Benz GLS-class than a Ford F-150. It's the truck that can convincingly shrug off its agrarian roots to make the trip to Pottery Barn in comfort.

The awesome 702-hp Ram 1500 TRX carries its own predictable set of compromises: single-digit real-world fuel economy, a \$71,790 starting price, and running boards so high they should come with a sign warning, "You must be this tall to enter." Surprisingly, though, on-road manners are not on that list. For

a truck that's built for desert running, dune bashing, and hill jumping, the TRX is unexpectedly delightful on paved roads. It uses soft long-travel springs to absorb big off-road hits, but rather than squishing and pitching and rolling around in traffic, the TRX ratchets up the stiffness of its adaptive dampers in pavement-oriented driving modes, giving the truck a sense of control on the road that's absent in its only competitor, the Ford F-150 Raptor.

In domesticating the American workhorse, Ram has built the best

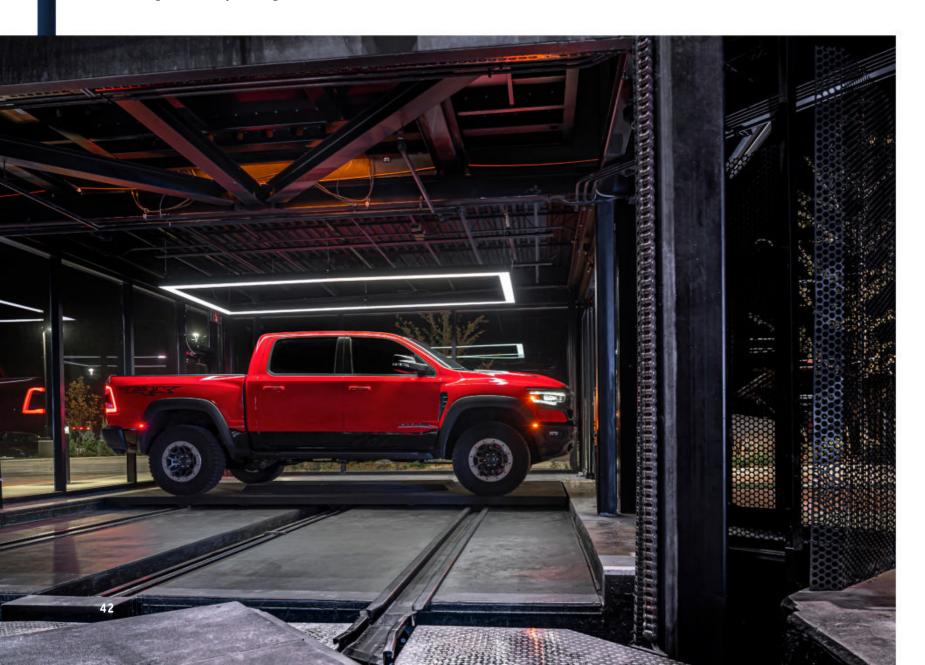
~ THE NUMBERS

260-hp turbo 3.0-liter diesel V-6, 305-hp 3.6-liter V-6, 395-hp 5.7-liter V-8, 702-hp supercharged 6.2-liter V-8; 8-speed automatic

Base: \$33,940-\$71,790 C/D Test Results 60 mph: 3.7-8.1 sec 1/4-Mile: 12.3-16.0 sec Top Speed: 107-118 mph Braking, 70-0 mph: 177-208 ft

Roadholding,

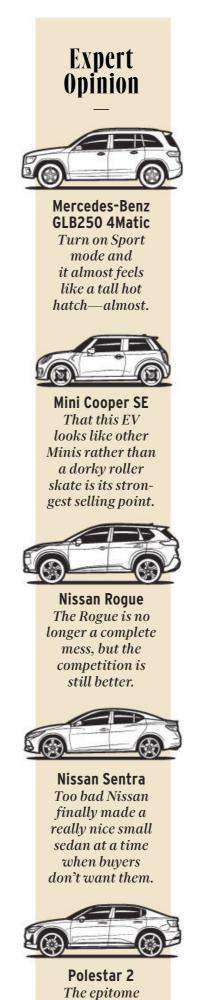
300-ft Skidpad: 0.69-0.78 g **EPA Comb/City/Hwy:** 12-26/10-22/14-32 mpg



pickup for the way most of us use trucks today: as everyday transportation instead of as a specialpurpose tool, moving people more often than payload and on suburban streets rather than in farm fields. On upper trim levels, Ram dresses the 1500's cabin with an attention to detail that shames many luxury cars. At 70 mph, it's as quiet as a church during the Super Bowl. For city slickers and cowboy commuters, the clever optional RamBoxes offer weather-tight, lockable storage that keeps cargo out of sight and out of the cab.

Our 10Best honor covers the full 1500 range, from the 305-hp base V-6 to the 702-hp TRX. Between those bookends, there's a diesel V-6 that scores up to 32 mpg in EPA testing and a 395-hp V-8 available with or without the eTorque 48-volt motor-generator. (We recommend going without it based on our 40,000-mile long-term test.) With any engine, the Ram is up for hard labor, but living with this truck is a reminder that the numbers—horsepower, tow ratings, and payload capacities tell only part of the story. The eight-speed automatic is always ready to drop the engine into the powerband. The uncanny ride quality translates to great body control in curves. Every element feels as if the engineers made it a point to polish the pickup truck's rough edges.

We're still car people at heart. We like the sure-footed handling of vehicles that are light and relatively low to the ground, and we typically respect the utility of a truck with an emotional detachment. But the Ram is so uniquely good to drive that it transcends the pickup-truck status quo. When we say that the Ram 1500 is the full-size truck that comes closest to driving like a car, we mean that as a high compliment. Why drive a big lumbering brute when you can drive a big nimble brute? — Eric Tingwall



of simple

sophistication.



he economics of modern manufacturing mean today's low-volume sports cars often languish in the market with minimal investment beyond the initial engineering effort. The Toyota Supra, however, makes our 10Best list for the second year in a row because its already strong value as a great sports car got even better.

For 2021, not only does the Supra 3.0's silken turbo inline-six gain an additional 47 ponies (now up to 382 horses), but an entrylevel model with a 255-hp turbo 2.0-liter four joins the lineup. Both BMW-sourced engines are two of







~ THE NUMBERS

255-hp turbo 2.0-liter inline-4, 382-hp turbo 3.0-liter inline-6; 8-speed automatic

Base: \$43,985-\$51,985 *C/D* **Test Results 60 mph:** 3.8-4.5 sec **1/4-Mile:** 12.1-13.1 sec

Top Speed (*C/D* **est):** 155-160 mph **Braking, 70-0 mph:** 149-152 ft

Roadholding,

300-ft Skidpad: 1.02-1.04 g **EPA Comb/City/Hwy:** 25-28/22-25/30-32 mpg

the best examples of their kind, delivering loads of low-end torque but also spinning to their redlines with zeal. Even the starter Supra gets to 60 mph in 4.5 seconds. That the six does the deed in 3.8 seconds yet returns 34 mpg on our 75-mph highway fuel-economy test helps soothe the sting from the continued lack of a manual-transmission option. At least the standard ZF eight-speed automatic is excellently tuned.

Regardless of the engine, all Supras deliver more than 1.00 g of skidpad grip and exhibit the neutral handling that makes a great rear-wheel-drive sports car so entertaining. Here, too, Toyota has made advancements, tweaking the steering for a more linear feel and refining the chassis and suspension to provide a better-controlled and surprisingly comfortable ride.

There's still room for improvement in the future. The Supra's arresting (if polarizing) design and snug low-slung cockpit hinder the view out of its slender windows. We'd also make the 3.0's electronically controlled limited-slip differential available on the base car, which could help tame its twitchy tail at the handling limit. But given the enhancements and the 2.0 model's \$43,985 base price—an \$8K discount versus the 3.0—last year's 10Best winner is now an even better package. That's how you make a sports car an enduring success. —Mike Sutton





Subaru Crosstrek

Honest, light, simple. Not trying to be something it isn't. Why aren't there more cars like this?



Toyota **Camry TRD**

The bones are there to make something really cool. Seems like a squandered opportunity.



Toyota Highlander

There's really no reason to choose the standard gas engine anymore. The hybrid is smooth and gets 30-plus mpg.



Toyota RAV4 **Prime**

Proof that an extra 100 horsepower goes a long wav in making any compact crossover significantly more interesting.

volkswagen

eing a fan of the Volkswagen GTI is a little like being a fan of the Yankees. You've aligned yourself with a perennial winner, but people are suspicious of your motives. Are you just a fan because it's the easily defensible choice? Unlike the West Coast transplant who buys a blue cap when they move to Brooklyn, we're not recognizing the GTI because we feel like we have to. The GTI was on *C/D*'s first 10Best list in 1983, and this year marks its 15th consecutive win. We reward it time and time again because it's just that good. As is its fraternal twin, the Jetta GLI.

These two cars share a 228-hp turbocharged inline-four, VW's MQB platform, a limited-slip differential, and a pair of transmissions. They get extra credit for

the standard six-speed manual, but the seven-speed dual-clutch automatic is excellent, too, and a little quicker. Either car with either transmission can make it to 60 mph in under 6.0 seconds. Get behind the wheel of a GTI or GLI and you'll find a playful and premium driving experience, with each offering a level of sensitivity to driver inputs that most makers of sport compacts can only dream of achieving.

What's more, for all this goodness, VW doesn't demand a single sacrifice in practicality. Both rows offer plenty of passenger space, and the GTI has a more usable cargo hold than some vehicles that claim to be crossovers. Plus, we managed 36 mpg in a manualtrans GLI and 34 mpg in an automatic GTI in our 75-mph highway fuel-economy test.

The interiors are businesslike, bordering on austere, but the controls are as intuitive as they come. There's a place for everything, and everything's in the right place. And you can't say the GLI's starting point of \$27,340 isn't attractive.

This is the final 10Best outing for the GTI before it is replaced by the next-generation model, which is already on sale in Europe. The new car will be more powerful, meaner-looking, and loaded with tech but largely cast from the same mold. Check back this time next year to see if we're still cheering for these all-time favorites, because our loyalty is only as strong as each year's team. —AW

~ THE NUMBERS

228-hp turbo 2.0-liter inline-4; 6-speed manual, 7-speed dual-clutch automatic

Base: Golf GTI, \$29,690; Jetta GLI, \$27,340

C/D Test Results **60 mph:** 5.5-6.2 sec 1/4-Mile: 14.1-14.7 sec **Top Speed:** 124-126 mph **Braking, 70-0 mph:** 153-181 ft

Roadholding, **300-ft Skidpad:** 0.87-0.98 g

EPA Comb/City/Hwy: 26-28/23-24/30-35 mpg







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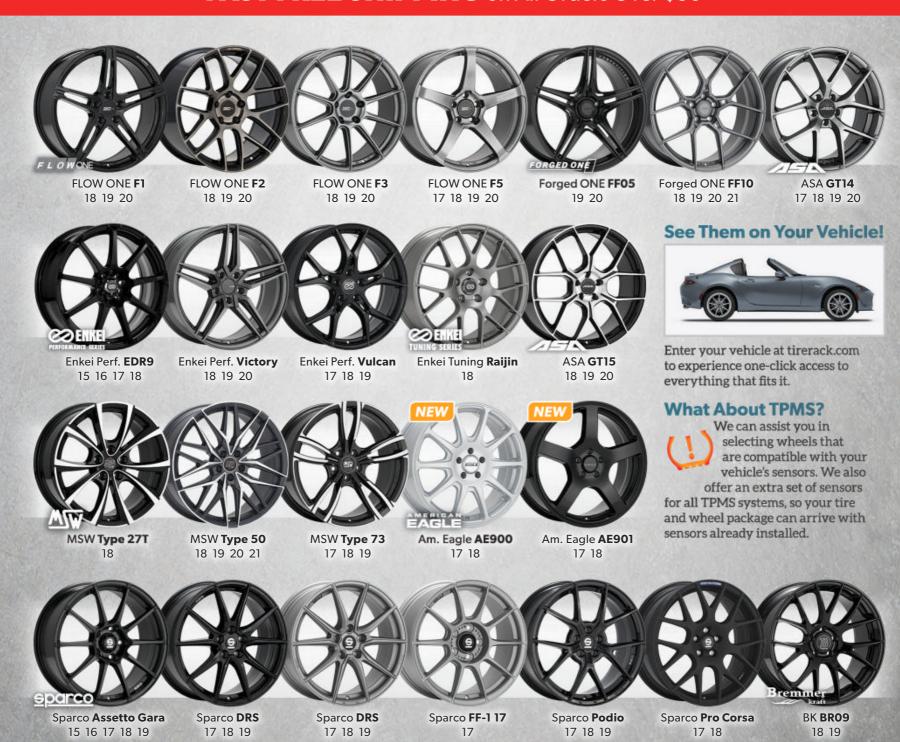
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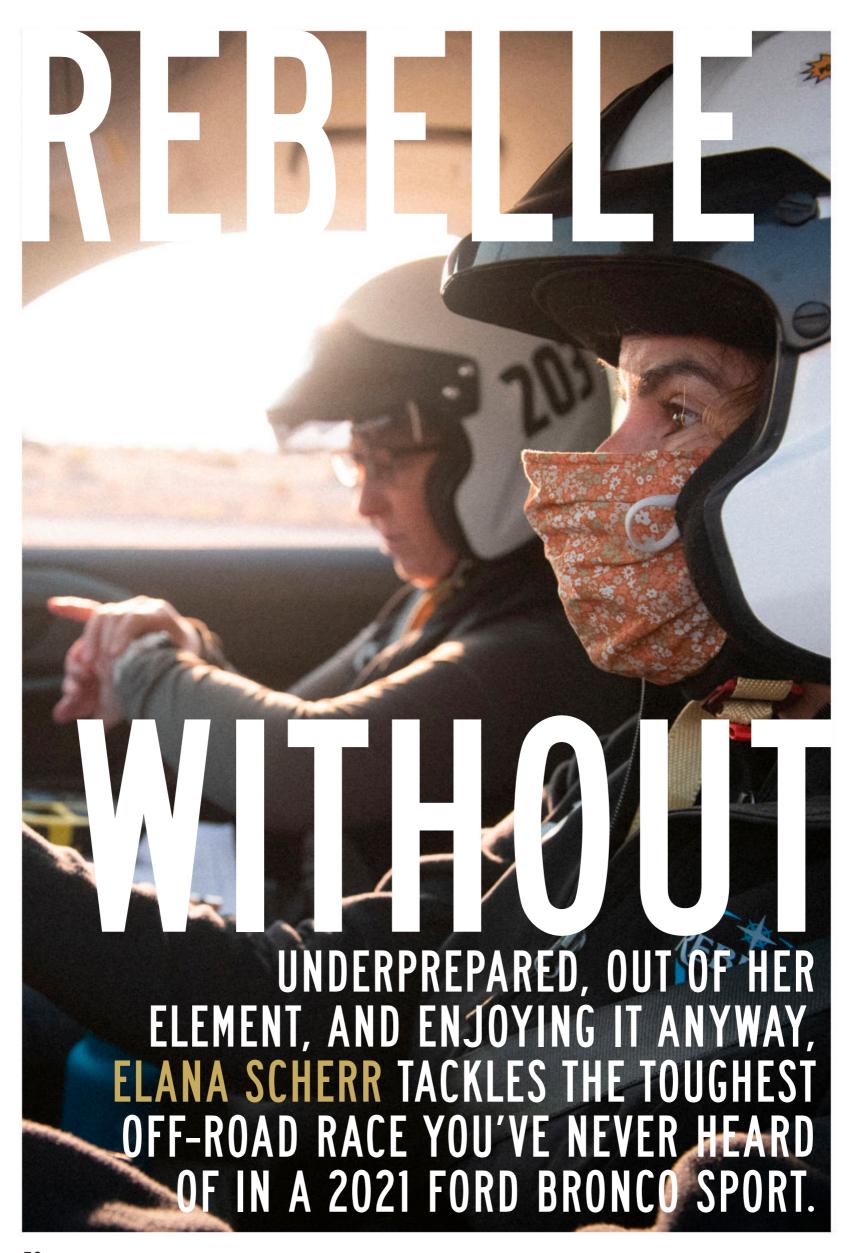
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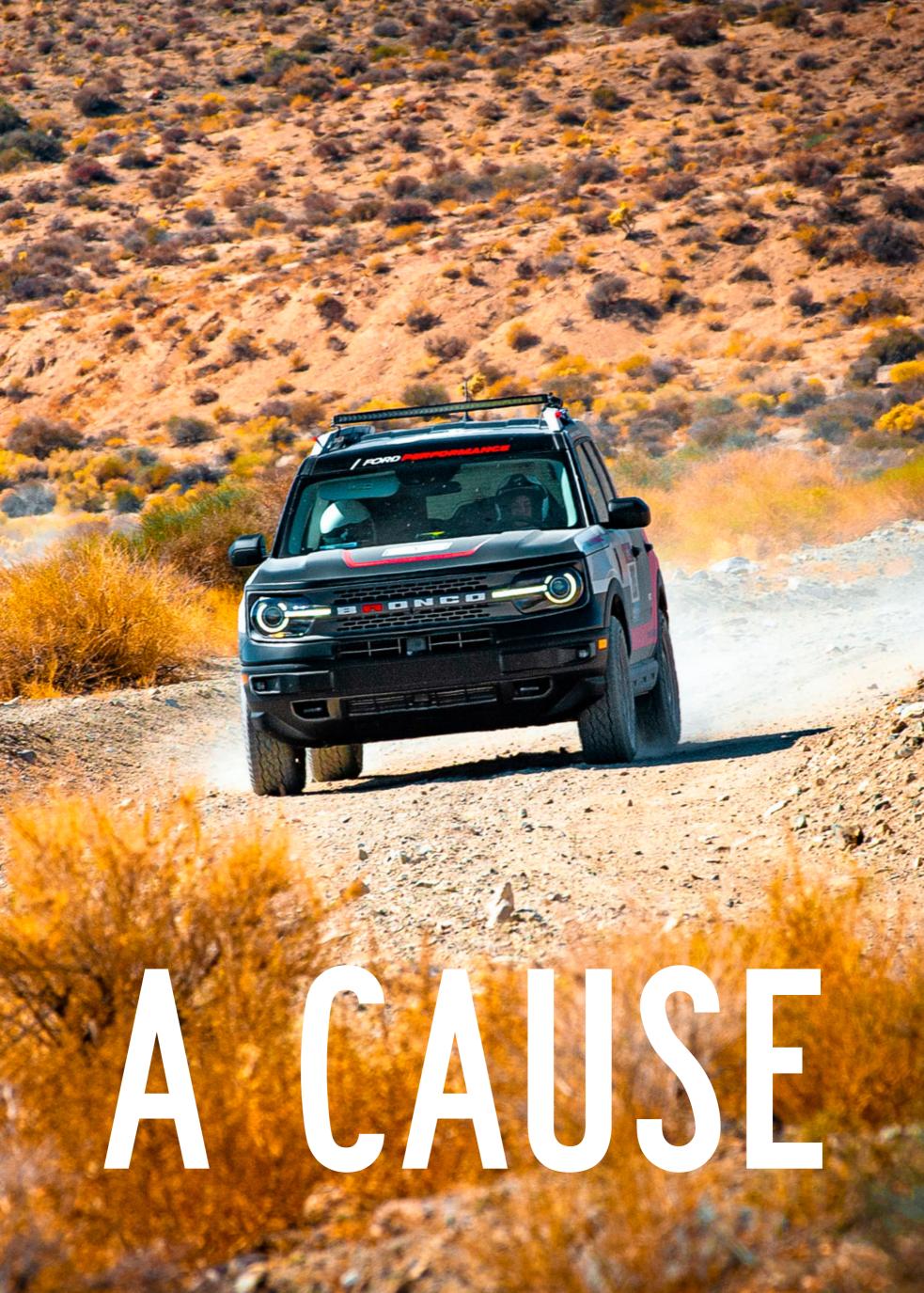




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oneself, in despair, in a tent infested with ants. "The Rebelle will strip you down to strengths

and weaknesses you didn't know you had," said the event's founder, Emily Miller, in the opening meeting. I squirmed in my seat, fully aware that I lacked pretty much every skill needed for a weeklong navigational run with no GPS or cellphone. I got lost two blocks from my own house the night before. My only off-road competition experience was as a navigator in the NORRA Mexican 1000; our lifted '57 Chevy broke and had to be towed out by a Subaru.

Above: The lineup at the Rebelle Rally illustrates the business case for resurrecting the Bronco. **Below: Scherr** uses her new compass skills to set a heading.



The Rebelle is an all-women's event whose participants include Baja racers, Dakar navigators, and all kinds of engineers—effortlessly competent women who look good in those quick-dry pants with all the pockets and can probably start a fire or fight a bear. I wouldn't be my first pick of people to send camping for eight days and put behind the wheel of a brand-new vehicle to test its off-road readiness. I can't even pee outside without getting it on my shoes. But Ford had a lot of confidence in its stock 2021 Ford Bronco Sport, enough to enter three of these new crossovers in the Rebelle and allow me to pilot one of them across more than 1500 miles of desert and mountains in the Southwest.

Rebelle is an off-road rally amid abandoned mines and fragrant sagebrush where competitors have to read map coordinates and hit checkpoints within a specific window of time. It's done with strategy, not speed, as most of the off-pavement areas have a speed

limit of 50 mph or below. A trophy truck would barely exceed idle at these velocities, but for a crossover like the Bronco Sport, going 50 mph over a rock-strewn section of whoops is about 25 mph too fast to keep the bumper cover from kissing dirt. Could the Sport, with its small-SUV stance and turbocharged 2.0-liter, take on the rocky realms more commonly ruled by solid axles and big V-8s? Why would anyone do this?

Well, to see if they can. And if they've already done it once, to see if they can do it better. The three-car Ford team was a mix of newbies and veterans. The A-team consisted of professional off-road racer Shelby Hall and experienced navigator and overlander Penny Dale, both of whom had come close to winning previous Rebelles but never quite nailed it. Erica Martin and Jovina Young made up the second duo. They're members of the Bronco marketing team and novices in off-road driving, map navigation, and motorsports

competition. They were there, like their vehicle, to test themselves against a brand-new challenge.

Then there was Betsy Anderson and me. We've covered my skill set, or lack thereof. Anderson came with actual qualifications: a Baja win, time spent as a navigator for off-road legend Walker Evans, and experience as an endurance racer on horse-back—making her the perfect co-driver for the Bronco. Oh, forgive me, Bronco Sport. The Sport is the pony to the big-horse Bronco. In the ever more blurred distinctions between SUV, truck, and raised-up car, the Bronco Sport sits at the edge of the crossover class, with a square trucky shape and surprising off-road capability. The Badlands trim amps up the off-road cred with seven all-wheel-drive modes (lesser models get five), rubberized flooring that cleans easily, and a torque-vectoring rear axle. The reborn Bronco, and the addition of the Bronco Sport, is Ford's own see-if-I-can-do-it-better moment, and the engineers are upfront about going tire to tire with Jeep, Subaru, and Land Rover.

We started in Nevada's Monte Cristo Mountains. At least, I hink we did. I don't remember much

think we did. I don't remember much but a steady stream of imperatives—and then expletives—directed at me from the passenger's seat. They escalated in tone from "Stop driving like a grandma" when I was going too slow to "WHAT THE F*CK ARE YOU DOING? YOU ARE HORRIBLE AT THIS!" when I sped up. "I bet she yells at Walker Evans, too," I told myself as I cowered and pointed at landmarks and whispered, "I dunno; you said to go there?"

"She not only yells at me, she hits," said Evans, when I asked him later. "He flipped us off a sand dune so I punched him," said Anderson.

In her defense, while I hadn't flipped



Where was this taken? "I never had any idea where the hell we were," Scherr says.

us off a sand dune, I was not prepared for the intense demands of the job. I had been expecting a series of dirt maintenance roads, and instead, we were picking our way across boulder-laden trails and over hills so steep you could stand at the bottom of one and see the vehicle's roof as it climbed. I was timid behind the wheel and did not understand the navigation, so Anderson was doing a lot of coaching, and neither of us had paid attention to the rules, so we kept racking up penalty points.

Despite this, we weren't doing that badly: Of the six teams in our class—formerly called Crossover but changed to X-Cross for 2020—we finished the second day in third place and experienced moments of transcendence amid the friction. Driving through a canyon, I looked up to see wild horses all around us; nine-year-old me would have died. Then they ran up a hill, backlit by a pink-tinged sun like a dang Lisa Frank folder, and we both cried. Another time, we noticed a crossroad on the map but saw no crossroad in sight. We were about to turn around, truly the worst feeling, when I got out and went full Inigo Montoya: "Guide my sword." And there it was, hidden behind a berm and bush, the most beautiful stretch of gravel going our way.





THE NUMBERS

Vehicle Type: front-engine, all-wheel-drive, 5-passenger, 4-door wagon

Base\$28,155-\$34,155 **Engines:** turbocharged and intercooled DOHC 12-valve 1.5-liter inline-3, 181 hp, 190 lb-ft; turbocharged and intercooled DOHC 16-valve 2.0-liter inline-4, 250 hp, 277 lb-ft

Transmission: 8-speed automatic

Dimensions

Wheelbase	105.1 in
• L/W/H	172.7/74.3/70.2-71.4 in
• Curb Weight	
Performance (C/D est	
40 1	

- 60 mph 5.8-7.8 sec • 1/4-Mile 14.4-16.0 sec Top Speed EPA Fuel Economy (C/D est)
- Comb/City/Hwy 26-28/23-26/30-31 mpg

On the third night, ants got in the tent. The ants were the biting kind.

We were warned the fourth day is often the hardest, but it started out great. Anderson mapped us to several difficult checkpoints and rewarded my improving driving with a rare "Good job." Near Mojave, California, we were coming into the Trona Pinnacles—which were definitely not referred to by several participants as the "Trona Penisacles," because we are grown-ups and respect the grandeur of geological marvels—when the Bronco Sport shook a motor mount loose. Fixable but at the cost of an hour's lost time and a 50-point penalty for requiring on-stage mechanical assistance from base camp. Alas, among the many rules we hadn't read was the one about making checkpoints before they closed. Perhaps spending another hour feeding a wild donkey apples out of our snack box was not the best use of competitive time. Our day ended up being pointsless but not pointless. Nobody else fed a wild donkey.

The next morning, we knocked a vapor-recoverysystem sensor off the bottom of the Bronco Sport, but having learned my lesson regarding mechanical assistance, I simply zip-tied it to the frame and we kept on. As I paid more attention to the maps, I recognized the mistakes we'd made earlier and began to understand why so many people are return competitors in the Rebelle Rally despite its hefty \$13,000 entry fee. Navigating by map is addictive. It's so different from following GPS, where the line goes through the area and the area is irrelevant. On a paper map, the line could be a road, or it could be a stream, or it could be a crinkle from a bad fold. It's the landscape that matters—the cuts between mountains, the dry riverbeds heading exactly where you need to be. Freeing oneself from the idea that the only path forward is a well-worn one? Inspirational.

The driving became more joyous, too, as we encountered fewer rocks and whoops, which were hard on the Sport. Despite the Badland's extra inch of ground clearance over other trim levels, it still offers only 8.8 inches of space between earth and machine, and it felt like every rock was 8.9 inches tall. The California desert suited the baby Bronco better than the mountains. The crossover's quick throttle and smart traction management in Sand mode let it skim the drifts with the confidence of a bulldog on a skateboard. In Dove Springs, red dirt hills rose out of lake beds, looking impossibly steep, and yet the Ford clambered up them without complaint or tire spin.

By the last day, Ford's A-team of Hall and Dale were neck and neck with a team in a Kia Telluride for the class win, and they set off bravely into the Imperial Sand Dunes in search of every possible point. We set off less bravely, as the towering sand mountains of Glamis rose like waves in a storm. As it had the whole week, the Bronco Sport surprised us with its lack of drama. Even with tire pressures high enough to make any self-respecting buggy driver scoff, the Ford never got stuck, and we rode out the day in air-conditioned comfort.

We found Martin and Young, the marketing duo, waiting for us just before the finish line, and we crossed it together in a nod to Ford's competition history. We ended up placing fifth and sixth in class, where Hall and Dale took the gold. The 4x4 class win

Sisters Rochelle **Bovee and Melissa** Vander Wilt competed in the 4x4 class using a 1969 Ford Bronco inherited from their father.

went to Kaleigh Miller and Teralin Petereit in a Jeep Wrangler, giving Ford a pretty strong reason to come back for 2021 with the big Bronco. Everyone wants to go back. It's worth turning off your phone, pulling out a map, and tracing a new path. Just to see if you can.





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AR AND DRIVER ~ JANUARY 2021 59

ou may not know that Mazda attempted a Lexus-style subbrand of its own in the early 1990s. That's because the automaker has mostly succeeded in quashing the story of its failed luxury spinoff, Amati, that collapsed with Japan's economy and never saw the light of day. But while we'll never know if the rumored 12-cylinder Amati 1000 could've been a bigger deal than the Lexus LS400, we haven't seen the end of Mazda's upscale ambitions.

Nearly three decades after the Amati experiment died, Mazda is pushing upmarket again. There are new head winds this time around namely a global pandemic that has hurt Mazda's bottom line—but the company appears to be staying the course. It confirmed recently that it's working on inline-six engines and a longitudinal-engine vehicle architecture, which could transform the lineup in a big way if they come to fruition. But while the carmaker has its sights on the future, it hasn't forgotten about the present, updating its current lineup with premium touches. Indeed, each new model that arrives furthers the impression that Mazdas are as nicely appointed as some Infinitis and Acuras these days-faint praise, perhaps-and yet, they cost much less.

The latest addition to the Mazda 3 lineup, the 2.5 Turbo, exemplifies this. It puts a new spin on the familiar big-engine-in-a-small-car formula. Rather than create another raucous, torque-steering Mazdaspeed 3 hot hatch, the automaker is using a more powerful engine (and the addition of standard all-wheel drive) as a way of pitching the 3 as an alternative to small Audi and Mercedes-Benz models.

It's the first time we've heard Mazda openly admit to going after

established luxury brands, so we're taking the claim seriously. To see how the 2021 Mazda 3 2.5 Turbo sedan stacks up, we drove it alongside a 2021 Audi A4 45 TFSI. This admittedly is not the 3's closest upmarket analogue—that would be the smaller Audi A3, the Mercedes-Benz A220, or the BMW 228i Gran Coupe. But the Audi and the Benz weren't available, and the BMW isn't much of a benchmark. Besides, this isn't a traditional comparison test, and we won't be picking a winner. Instead, we're seeking to answer the question: How close is Mazda to being able to run in the same circles as true luxury brands?

The 3 is a conventionally sized compact car with a transversely mounted engine. The turbocharged version starts at \$30,845, and our loaded Premium Plus sedan cost \$33,790. The A4 in its high-powered 45 trim starts at \$41,945, and our well-equipped test car was \$53,840. As a competitor in the BMW 3-series segment, the Audi is significantly wider than the Mazda, and it has a longer wheelbase. But perhaps the most notable difference between the two is that the A4's inline-four is mounted longitudinally.

The sedan's long, low hood means your neighbors won't think you just bought a Toyota Corolla.

Underneath that shapely hood is the same turbocharged 2.5-liter inline-four now available in nearly every Mazda. It's offered only with all-wheel drive and a six-speed automatic transmission. (Manuals are too immature for Mazda's new target audience, apparently, although the nonturbo 3 hatchback still offers

This distinction in layout is an

important one. Cars with longi-

tudinal engines typically boast

larger dash-to-axle lengths—also

known as prestige gaps—than

those with transverse powerplants.

We don't expect Mazda will rotate

the 3's engine in the future—as it's

planning to do for larger models

such as the 6 and CX-9—but it has

employed some design trickery to

try to give the 3 a bit of that prestige.

too immature for Mazda's new target audience, apparently, although the nonturbo 3 hatchback still offers a clutch pedal.) This engine's 250 horsepower and 320 pound-feet of torque put it well within the realm of the turbocharged fours found in compact luxury cars these days. But its unusual tuning creates a different character altogether. Mazda says it aimed for the feel of a naturally aspirated six-cylinder, even claiming that the power delivery is similar to that of a previous-generation Porsche Cayman S's flat-six. It's not. This turbocharged 2.5-liter provides

It's hard to beat an Audi on interior style, but the Mazda's materials and ergonomics are decidedly premium.





convincingly upscale proportions, particularly the long, low hood and the front axle that doesn't crowd the front door.

2021 Audi A4 45 TFSI

Vehicle Type

Base/As Tested Engine

Displacement
Power
Torque
Transmission
Dimensions
Wheelbase
L/W/H
Curb Weight

TEST RESULTS

60 mph 100 mph 130 mph 1/4-Mile

Rolling Start, 5–60 mph Top Speed (gov Itd) Braking, 70–0 mph Roadholding, 300-ft Skidpad EPA Fuel Economy Comb/City/Hwy front-engine, all-wheel-drive, 5-passenger, 4-door sedan \$41,945/\$53,840

turbocharged and intercooled DOHC 16-valve inline-4, iron block and aluminum head, direct fuel injection 121 in³, 1984 cm³ 261 hp @ 6500 rpm 273 lb-ft @ 1600 rpm 7-speed dual-clutch automatic

111.0 in 187.5/72.7/56.2 in 3705 lb

4.8 sec 12.9 sec

13.5 sec @ 102 mph Results above omit 1-ft rollout of 0.3 sec. 5.6 sec 126 mph 149 ft

27/24/31 mpg

0.97 g

2021 Mazda 3 2.5 Turbo

front-engine, all-wheel-drive, 5-passenger, 4-door sedan \$30.845/\$33,790

turbocharged and intercooled DOHC 16-valve inline-4, aluminum block and head, direct fuel injection 152 in³, 2488 cm³ 250 hp @ 5000 rpm 320 lb-ft @ 2500 rpm 6-speed automatic

107.3 in 183.5/70.7/56.9 in 3392 lb

5.6 sec 14.3 sec 28.5 sec 14.1 sec @ 99 mph Results above omit 1-ft rollout of 0.3 sec. 6.4 sec 134 mph 169 ft 0.85 g

27/23/32 mpg

a satisfying swell of low-end torque, but its grumbly engine note detracts from the 3's sense of refinement. It's also lacking the lively top end of a free-breathing six-cylinder. The 2.5-liter starts to run out of steam at around 5000 rpm, and the transmission often shifts well before the low 6250-rpm redline.

Audi's 261-hp turbo 2.0-liter, one of the best four-cylinders in the industry, provides a similar low-end shove while also offering up eager power throughout the rev range. The A4's seven-speed dual-clutch automatic provides crisper and quicker shifts than the 3's conventional automatic, and the Audi outruns the Mazda to 60 mph by 0.8 second and through the quartermile by 0.6 second despite the A4 being 313 pounds heavier.

The 3's suspension tuning is distinctly softer than that of the satisfyingly firm A4, resulting in more body roll than we'd like from a sports sedan, or even just a sporty one. The Mazda's workaday Bridgestone Turanza EL440 all-season tires dull its turn-in and provide a mediocre amount of grip—0.85 g compared with 0.97 g for the A4, which wore Continental Sport-Contact6 summer rubber. And vet, there's a sense of playfulness that largely comes from the 3's communicative steering rack, which transmits just the right amount of information from the road surface directly to your fingertips. While the Audi's competence on a curvy road is impressive, the Mazda provides a subtle sort of delicacy from the primary controls that we enjoy.





tive and have four-way lumbar adjustment (to the Mazda's two), but driver comfort is similar in both cars.

But chasing solidity and sportiness is not the only path to success as a premium brand. BMW has deemphasized chassis agility in recent years, yet it sells more vehicles now than ever. And Lexus has consistently found success peddling the cushy ES sedan and RX crossover, which prioritize soft, quiet comfort over engaging handling. It would be a shame and a mistake for Mazda to turn its back on the zoomzoom ethos entirely, though. If Mazda adds a bit more sound isolation—the 3 is a hair quieter than the Audi at idle but louder at a 70-mph cruise and wide-open throttle—it could find its way to a sweet spot between comfort and Miata-like dynamics.

Beyond the driving experience, there's another area that separates the luxurious from the mainstream: amenities. It's here that mass-market brands have made up an enormous amount of ground lately. Before, when luxury brands would introduce a new safety or connectivity feature (think airbags and navigation), that tech would take years to trickle down to the mainstream. But now, the feature adoption happens much sooner. Mainstream brands were quick to provide Apple CarPlay and Android Auto compatibility as standard equipment, while luxury brands have only recently stopped charging extra for it.

This has raised consumer expectations for features beyond the basics. Mazda gets this. The 3 offers classabove niceties such as a 360-degree camera system and a head-up display, neither of which you'll find in a Civic or a Corolla. What it's missing are details such as a powered passenger's seat and hydraulic hood struts. The 3's rear-seat area also betrays its plebeian roots, as it lacks the higher-than-footlevel HVAC vents and USB charging ports found in the back of the A4.

Luxury 101: Mazda 3 Report Card

Build Quality

Satisfactory
Top-notch fit and
finish, tight panel gaps
Needs Improvement
Doors feel hollow
and could close with
a more solid thunk

Feature Content

Satisfactory

Offers premium equipment like a head-up display, a 360-degree camera system, and driverassistance tech Needs Improvement

Could use a powered passenger's seat, hood struts, and rear-seat USB ports

Driving Sophistication

Satisfactory

Ample steering feedback, transmission's Sport-mode programming

Needs Improvement

Lacks a summer-tire option, needs better engine isolation

Brand Image

included

Satisfactory
Stellar looks
Needs Improvement
No scheduled
maintenance or
concierge service

But overall, we dig the Mazda's interior. The 3's steering-wheel buttons have an attractive satin finish and click with a precision that matches the Audi's. And while Mazda's infotainment system has quirks in its menu structure, we appreciate that the 3 has stuck with an ergonomically friendly control knob on the center console as opposed to the Audi's touchscreen-only interface.

Although our evaluation of these cars has little to do with the broader ownership experience, customer service merits a mention in any discussion of a luxury brand. Mazda says it's working on a transformation plan for its 550 stores in the U.S.; 150 of those franchises have already completed a cosmetic update, and 300 more are signed up to do the same. Mazda has yet to introduce an included maintenance program or a concierge service, but we wouldn't expect it to given that Mazda still charges mainstream prices for its vehicles.

We don't think that will last, though, as there's no way Mazda can afford to roll out its new engines and platform without some price creep. A rear-wheel-drive 6 with an inline-six that costs the same as a Camry would be simply too good to be true. Plus, charging more for a product is often the best way to convince the buying public that it's worth more.

As it stands now, the Mazda 3 2.5 Turbo offers a hell of a lot of car for the money, while the Audi A4 offers an appropriate amount of car for the money. If Mazda can hone the details and successfully introduce the new platform and engines, it has a shot at achieving its goal. It definitely has a better chance than Amati had.



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Always a bellwether of automotive technology, the Mercedes-Benz S-class shifts its focus from nuts and bolts to pixels and lidar point clouds.

By Mike Duff

UPMARKET-AUTO BUYERS are showing an increased preference for SUVs pretty much everywhere in the world, yet the S-class remains—explicitly—Mercedes's flagship model. A new generation of the Sonderklasse always serves as both a range-topping luxury sedan and a tech showcase for features that will soon trickle down to lesser Benzes. Mercedes is rightly proud of the many innovations that previous S-classes introduced, including anti-lock brakes (1978), electronic stability control (1995), adaptive cruise control (1998), and all-LED lighting (2013). This generation (W223 in Benz code) adopts the active chassis aids and 48-volt electrical subsystem that we've seen in the GLE and GLS, but in terms of charting a course for Mercedes, the focus has shifted toward digitizing the driving experience and the cockpit.

While there is indeed an abundance of new features in the S-class, the first impression is of

what's missing—namely, bravado. This flagship is less ostentatious than its predecessor, lacking the old car's baroque detailing and incorporating slightly smaller, more modest headlights and taillights. The S-class's increase in size over the outgoing version is similarly underwhelming, with the W223 gaining 1.3 inches in length and sitting on a wheelbase stretched by 2.0 inches. Tesla-like door handles sit flush within the body, popping out when stroked

or when the car senses the presence of an approaching smart key.

There's more Teslafication within the cabin, with a vast 12.8inch OLED touchscreen dominating the dashboard. At first glance, it actually looks as if someone left an open laptop on the center console—it's that big. This screen is the primary interface for almost all functions beyond basic driving. Even the climate controls are now rendered digitally. This means that Mercedes's cabin designers have surrendered much of the prime real estate where they previously demonstrated their craft so well. The last S-class had four machined air vents and



Other debut features include an enhanced version of the augmented-

even authentication for purchases

made through onboard apps.

The 12.3-inch digital instrument cluster also gets a pioneering feature: 3-D display capability, which presents slightly different images to each eye to give a sense some people feel queasy. Fortunately, drivers can easily return to the conventional 2-D view.

The new S-class will also support hands-off-the-wheel, eyes-



Mercedes won't launch the vehicle with its full capability due to regulatory concerns [see "Nontonomy"]. For the moment, Merc's existing Distronic smart cruise control regulates speed and follows lane lines with the driver's hands on the wheel. One of the display options on the reconfigurable digital dashboard now relays what this system can see in terms of lane markings and other road users-distinguishing between cars, trucks, and motorcycles. In our hands, Distronic handled highway speeds well but struggled to deliver smooth stops when dealing with heavy traffic. It also includes automatic speed regulation based on posted limits, although we found that the car missed speed limit changes several times.

In U.S.-bound S-classes, Mercedes will initially offer two engines, both of which incorporate 48-volt hybrid assistance and pair exclusively with a nine-speed auto and all-wheel drive. The entry model, called S500, gets a 429-hp super-

charged and turbocharged 3.0-liter inline-six, and the S580 receives a 496-hp twin-turbo 4.0-liter V-8. We drove the latter on a route from Stuttgart to Mercedes's proving ground at Immendingen via a stretch of unrestricted autobahn. In the ordinary course of vehicle evaluation, this would lead to an immediate attempt to find the vehicle's speed limiter and hold it there for as long as possible, but with the S-class, we took our time reaching Vmax in order to better appreciate the car's exceptional sound insulation. At 80 mph, we heard more noise from other traffic than from the car itself.

The V-8 barely announces itself even as it creates forceful acceleration. In the most aggressive dynamic setting (called Sport Plus, a mode that feels at odds with the S-class's character and purpose), the engine stays hushed under all but stomped-throttle progress. And even then, the V-8 sounds distant and muted. Suspension settings are similarly comfort oriented, with both adaptive dampers and air springs standard. The big Benz sits 0.7 inch lower in Sport

We also got to sample the optional E-Active Body Control (E-ABC) system, which adds a road-scanning camera and an active anti-roll system. The latter doesn't use an anti-roll bar augmented by an electric motor as the Audi and Aston systems do; rather, it relies on a hydraulic system pressurized by a 48-volt pump. It works well, neutralizing body roll effectively. Mercedes will also continue to offer a Curve mode, which allows the S-class to lean into turns like some kind of four-door motorcycle. Our car didn't have this function, but we're told it will come with E-ABC in the U.S.

At lower speeds, the S580 also showed off another of its innovations: a new all-wheel-steering system that can turn the rears a substantial 10 degrees. When this option is fitted, the turning circle of the S-class drops to just 35.8 feet, which is better than that of the A-class, the company's smallest sedan. The sensation of the system working is initially odd, as you feel the rear end moving out as the front turns in. But the increase in maneuverability is obvious and

impressive. Mercedes will offer the 10-degree rear-axle system only on the S580 with the Executive Line pack, but the AMG Line trim (available with either engine) brings a less aggressive 4.5-degree version that delivers a 39.0-foot turning circle. Above 37 mph, both systems provide much smaller degrees of in-phase steering to boost stability.

We also took a drive in the entrylevel S500 and can confirm that buyers won't be giving up much in terms of performance or experience by selecting the smaller powerplant.

THE NUMBERS

Vehicle Type: front-engine, all-wheel-drive, 5-passenger, 4-door sedan

Base (C/D est): \$100,000-\$110,000

Engines: supercharged, turbocharged, and intercooled DOHC 24-valve 3.0-liter inline-6, 429 hp, 384 lb-ft; twinturbocharged and intercooled DOHC 32-valve 4.0-liter V-8, 496 hp, 516 lb-ft Transmission: 9-speed automatic Dimensions

Wheelbase: 126.6 in
L/W/H: 208.2/76.9/59.2 in
Curb Weight: 4950-5050 lb
Performance (C/D est)

• 60 mph: 4.1-5.0 sec • 100 mph: 10.2-12.5 sec • 1/4-Mile: 12.7-13.5 sec • Top Speed: 130 mph

EPA Fuel Economy (C/D est)Comb/City/Hwy: 23-24/20-21/29-30 mpg

Low-end responses feel very nearly as keen as those of the V-8 thanks to the immediacy of the electrically driven supercharger and the integrated electric motor-generator, which can contribute up to 21 horsepower and 184 pound-feet of torque. The six's high-rev rasp, although subdued, is at least as aurally interesting as the eight-cylinder's muted roar. On a quiet stretch of autobahn, we confirmed that only above 120 mph does the S500 start to feel noticeably slower than the S580, taking considerably longer to arrive at its top speed.

Both the S500 and the S580 will reach the U.S. during the first half of 2021. The best toys will be reserved for the various option packages, but the standard specification will include the OLED dashboard interface, a Burmester stereo, and the full suite of driver-assistance systems. Beyond that, we expect Mercedes to release an AMG with a brawnier V-8, a plug-in hybrid that should offer class-leading electric range, and ultimately a Maybach S-class—possibly with V-12 propulsion. But even in its most basic form, the S-class continues to represent Mercedes at its best. **■**

Mercedes designers have lost a primary exhibition space to a monolithic screen, but everything else you can touch, see, and smell inside the S-class radiates the brand's characteristic craftsmanship.





The S-class's star feature turns out to be an experiential damp squib. The car can support Level 3 (i.e., driver at the wheel but eyes off the road) autonomy using a battery of sensors including a lidar scanner to watch for obstacles, cameras to monitor the driver's attention level, and microphones to listen for sirens. High-definition maps boost the car's positional accuracy on the road to within an inch.

But Germany follows the U.N.'s regulations on automated lane-keeping systems, so when the new Drive Pilot launches there in the second half of 2021, Mercedes will restrict hands-free operation to no more than 37 mph and disable automatic lane changing. A demonstration at Merc's Immendingen test track was anticlimactic; the S-class regulated its speed and distance in traffic, but it felt no more sophisticated than any existing driver-assistance system. **Eyes-off operation with** lesser systems isn't advisable, although that hasn't stopped many Tesla drivers.

Mercedes engineers say their system is capable of supporting much greater speeds and directional responsibility, but they won't say when, where, or in what form the Level 3 capability will roll out after the home-market launch. For the moment, the Mercedes system feels timid and overly cautious compared with Cadillac's smart, decisive Super Cruise, even if the latter requires drivers keep their eyes on the road. —MD

A dealer in southeastern Ohio advertises 750-hp Mustangs for almost \$30,000 less than the Shelby GT500. Can a tuned Mustang hang with Ford's factory hot rod?



In 2013, a customer walked into Lebanon Ford, just north of Cincinnati, and asked salesman Charlie Watson about buying a supercharged Mustang. Watson didn't have one and the dealership couldn't build one, and the customer left. The moment ate at Watson. He hated losing that sale, so he spent three years creating a performance program for the dealership to offer what he couldn't that day.

By 2016, Watson had built a following selling small upgrades like cold-air intakes, Roush tunes, and the occasional supercharger. He was inspired to go bigger, though, after watching *Smokey and the Bandit*: "Hearing that Trans Am fire up and cause trouble was just as amazing as I remembered," he wrote on the dealership's now defunct blog in April 2016. In bed that night,

he couldn't shake the charge he got from that Pontiac on the screen. "It hit me that all that car was," he said, "was a chassis and a big engine." It lacked the electronic, aerodynamic, and suspension upgrades that push modern performance cars like today's Mustang Shelby GT500 outside the average enthusiast's budget.

Watson wondered what would happen if he took a base Mustang GT, put a blower on it, pushed it to 700 horsepower, and sold it for something reasonable. He wrote on the blog that "after recalculating several times, pinching myself, and rubbing my eyes," he finally had his answer: a 727-hp Mustang for \$39,995. He was so excited, he posted

By Jonathon Ramsey Photography by Andi Hedrick





the deal around 1:00 a.m. Customers put down deposits the next day. When the news hit Yahoo's front page a few weeks later, the dealership had to hire a call center to manage all the inquiries. Watson had struck a chord with his high-horsepower, low-dollar Mustangs.

In 2017, he took his program a few miles south to another dealer and created Beechmont Ford Performance (BFP). Today, BFP will sell you a new Mustang GT with a six-speed manual and a Roush Phase 2 supercharger bellowing a claimed 750 horsepower and 670 pound-feet of torque for \$44,994. The modifications can be financed with the car and are covered by a three-year, 36,000-mile warranty. And because of Roush's close relationship with Ford, you can have the car serviced at Blue Oval dealers across the country.

BFP only builds cars to order, so it sourced a 2019 Mustang with a 10-speed



"Watson has
turned his
corner of Ohio
into a mecca
for enthusiasts
looking for
custom highperformance
Fords they
can't get from
the factory."

automatic and a 750-hp supercharger package from customer Charles Gerhardt for us to test. At idle, the 61-decibel rumble from the Roush axle-back exhaust sounds like a warning, and the black 20-inch Niche wheels wrapped with staggered Nitto NT555 G2 rubber add to the imposing presence. This BFPbuilt Stang will happily smoke its rears at 60 mph, yet when shuffling through traffic, it feels like a stock Mustang GT. Barreling down on-ramps gives us an almost roller-coaster-like rush. Kick the throttle at 50 mph and 70 arrives just 2.3 seconds later. Repeat at will, laughing maniacally between stabs until the authorities hunt you down. Which won't take long because, when spurred for all it has, the BFP Mustang positively roars through that Roush exhaust.

But that was after the car was fixed. Our initial outing to the test track had us asking, "Where's the beef?" Hitting 60 mph in 4.0 seconds and clearing the quarter-mile in 12.3, the BFP car was two-tenths slower to 60 and threetenths slower in the quarter-mile than a stock Mustang GT with the automatic. The BFP car clearly wasn't making 750 horsepower. Plus, Gerhardt's tire selection had the grip of a greased watermelon, dropping the skidpad performance from 0.97 g on the stock GT to 0.84 g.

We shipped the car back to BFP, who, after questioning our ability to test cars, discovered that the Mustang was running the wrong software. With the correct code installed, we returned to the track for a second run. A Roush pit crew also swung by to bolt on a different set of 20-inch wheels and Continental ExtremeContact Sport tires, a combination that comes with Roush's Stage 3 car and which BFP sells separately for \$3022.

This time the modified Mustang dashed to 60 mph in 3.6 seconds, squeezing between the stock GT's 3.8-second sprint and the 760-hp Mustang Shelby GT500's 3.4-second time. The BFPbuilt Stang ticked off the quarter-mile in 11.7 seconds at 124 mph, chasing the GT500's run of 11.3 seconds at 132 mph. That's a little off the mark considering the pounds-per-advertised-horsepower ratio of the modified Mustang, at 5.2:1, is better than the 5.5:1 proportion of the GT500. And while cornering grip climbed to 0.95 g, it failed to match that of the GT with Michelin Pilot Sport 4S tires. We also mistook a software glitch

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that wouldn't allow wide-open-throttle shifts into sixth gear for a 135-mph governor. Roush is working on a fix for that.

BFP's customers aren't just looking for cheap speed, though. The market is as much about personalization as it is performance. Newkirk, Oklahoma's Alex Hartley spent five years researching his dream Mustang. He began with a specially ordered Stang because he wanted all the go-fast hardware but none of the weight from luxury options, and by the time BFP was finished, Hartley had a Whipple supercharger, long-tube headers, beefy internals, and a highcapacity fuel system. He also insisted on getting the final tune from the Mustang specialists at Lund Racing, which BFP arranged. Christened Cornyote and used as a daily driver, his Mustang netted 750 horsepower on a tank of E85 and cost \$55,000. He has since added a smaller pulley that bumps the output to 850 horsepower, and when he bolts on a set of 11.3-inch-wide drag radials out back, Hartley runs mid-nines at the drag strip.

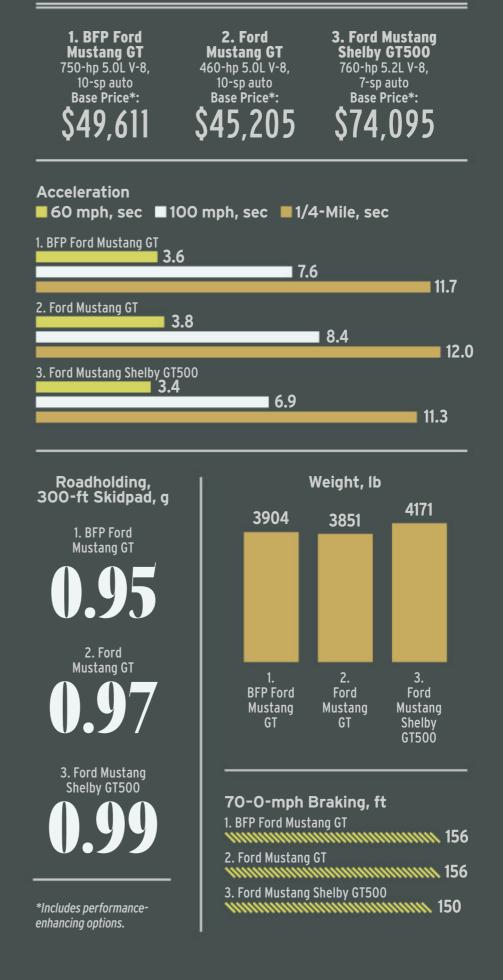
Of course, modified cars seldom add up to the sum of their parts. Gerhardt's Mustang—particularly on those Nitto tires—is a reminder about the perils of parts-catalog engineering. With a seemingly infinite number of choices in the aftermarket, there are more ways to screw up a car than improve it. Hot-rodders are often their own worst enemies, as they spend thousands of dollars piecing together cars that handle worse than the factory setup or that are simply unlivable in traffic. Building a car that's objectively better than Ford's best work will never be cheap or easy to come by.

With its tuned Mustangs, BFP isn't exactly David slinging rocks at Goliath. But the company has carved out a niche amid Ford's crowded pony-car lineup. The basic BFP build trades away the performance that's rarely used on public roads while doubling down on the straight-line grunt that most muscle-car buyers want. This kind of personalized package—served up with a warranty for less than \$50,000 versus the GT500's \$74,095 outlay—is why BFP gets 1000 calls every month asking about builds. Seven years after that customer seeking a supercharged Mustang left disappointed, Watson has turned his corner of Ohio into a mecca for enthusiasts looking for custom high-performance Fords they can't get from the factory.

BFP Ford Mustang GT

THE NUMBERS Vehicle Type: front-engine, rear-wheel-drive, 4-passenger, 2-door coupe \cdot Base/As Tested: \$44,994/\$52,444 \cdot Engine: supercharged and intercooled DOHC 32-valve V-8, aluminum block and heads, port and direct fuel injection Displacement: 307 in³, 5038 cm³ \cdot Power (mfr's claim): 750 hp @ 7000 rpm Torque (mfr's claim): 670 lb-ft @ 4600 rpm \cdot Transmission: 10-speed automatic Dimensions, Wheelbase: 107.1 in \cdot L/W/H: 188.5/75.4/54.3 in \cdot Curb Weight: 3904 lb

TEST RESULTS 60 mph: 3.6 sec \cdot 100 mph: 7.6 sec \cdot 1/4-Mile: 11.7 sec @ 124 mph 130 mph: 13.0 sec \cdot *Preceding results omit 1-ft rollout of 0.3 sec.* \cdot Rolling Start, 5-60 mph: 4.0 sec \cdot Top Speed (mfr's claim): 155 mph \cdot Braking, 70-0 mph: 156 ft Braking, 100-0 mph: 310 ft \cdot Roadholding, 300-ft Skidpad: 0.95 g





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THE RUNDOWN

An expert look at the newest and most important vehicles this month.

The Hellcat for the family with lots of kittens, page 76.



2021 FORD F-150 HYBRID 4WD ~ BY MIKE SUTTON

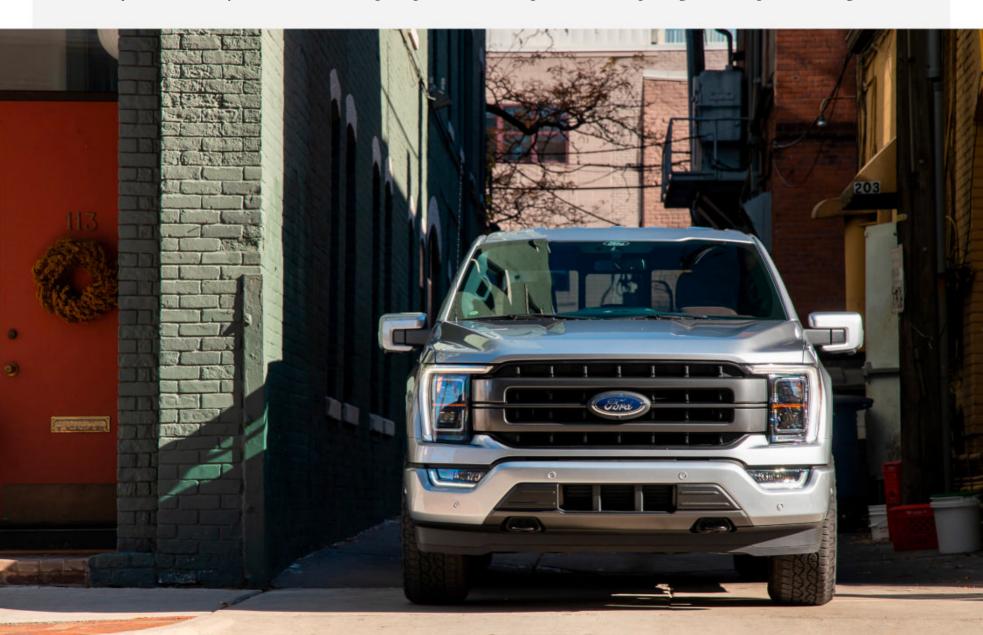
Electrifying a Workhorse

Highs: Upgraded interior and tech, pin-you-to-your-seat acceleration, real EPA mpg gains. Lows: Variable steering isn't standard, Ram 1500 rides better, needs two-thirds of a football field to stop from 70 mph.

When a hybrid achieves only a 4-mpg gain over its donorengine counterpart, it may not seem worthwhile, but in a pickup like the new Ford F-150, boosting the 3.5-liter V-6's fuel economy by 4 mpg is a 20 percent improvement. That's nothing to sneeze at. And when said hybrid runs just as smoothly as the unelectrified pickup while providing nearly as stellar payload and towing capacities, why not stretch your gallons a little further?

Debuting in the refreshed-for-2021 F-150, the PowerBoost hybrid pairs Ford's twin-turbocharged 3.5-liter V-6 with a 44-hp electric motor, making this the highest-output powertrain in the current F-150 lineup. (Ford has yet to lay out what's under the hood

of the 2021 Raptor, which will almost certainly outmuscle this.) The motor is sandwiched between the engine and the standard 10-speed automatic, while a 1.5-kWh lithium-ion battery tucks under the bed. The battery may seem a bit small for a truck, but this is a hybrid, not a plug-in, and a small pack is easier to package and cheaper than a large one.









More importantly, a relatively light battery won't significantly impact payload and tow ratings the way a large battery would. Combined output for this powertrain is a stout 430 horses and 570 pound-feet of torque—gains of 30 ponies and 70 pound-feet versus the updated nonhybrid EcoBoost 3.5-liter.

At 5794 pounds, our four-wheel-drive Lariat weighed 200 pounds more than the last F-150 Limited we reviewed, yet its solid 5.4-second run to 60 mph means it's fleeter than most half-ton trucks. In fact, that ties the quickest time we've recorded for a modern F-150 that wasn't powered by Ford's Eco-Boost 450-hp V-6. Plus, the max payload and towing capacities for the hybrid are impressive, at 2120 and 12,700 pounds, respectively.

The motor isn't designed to provide meaningful acceleration on its own, but it



With the \$165 Interior Work Surface option, the F-150's shifter motors into a stowed position so the center armrest can fold out into a desk. does allow for short periods of electric cruising. Transitions from gas to electric power are almost imperceptible, as is the changeover from regenerative to friction braking. The four-wheel-drive hybrid scores 24 mpg on the EPA's combined cycle, 4 mpg more than a regular EcoBoost 3.5 F-150 manages.

Minor tweaks to the truck's chassis and suspension keep it quiet and composed, although rough pavement can elicit an occasional shudder from the leaf-spring rear axle. We particularly like the tight, direct action of the new variable-assist steering that's standard on the fancy King Ranch model and above, but the standard rack on our Lariat model wasn't as sharp and required more handwork at slower speeds. Depending on how you use a pickup, the hybrid's most transformative feature may be its onboard generator system, which provides up to a substantial



POWER PLAY

Tailgating just got a lot easier with Ford's new Pro Power Onboard generator, which sends electricity to outlets in the bed. A 2.0-kW setup with two 120-volt outlets is available on certain gas-powered models, while hybrids get a 2.4-kW unit standard. For \$750, hybrid buyers can upgrade to a 7.2-kW system, which adds two more 120-volt plugs and a 240-volt outlet. The top system can provide 32 hours of continuous power on 30.6 gallons of gas (that's a full tank), and owners can monitor energy usage through the cabin's touchscreen. This may not sound all that handy if you don't regularly use power tools out in the field, but even the base setup produces more than enough juice to power a TV and stereo, an electric grill, and a minifridge. –MS

THE NUMBERS

Vehicle Type: front-engine, rear/4-wheel-drive, 5-passenger, 4-door pickup

		•••••		
As Te	sted	 	\$66	,345

Powertrain: twin-turbocharged and intercooled DOHC 24-valve 3.5-liter V-6, 394 hp, 492 lb-ft; permanent-magnet synchronous AC motor, 44 hp, 221 lb-ft; 1.5-kWh lithium-ion battery; combined system, 430 hp, 570 lb-ft

Transmission: 10-speed automatic **Dimensions**

• Wheelbase	145.4 in
• L/W/H	231.7/79.9/77.2 in
	5794 lb

TEST RESULTS

(i	
60 mph	5.4 sec
100 mph	13.7 sec
	13.9 sec @ 101 mph
	mit 1-ft rollout of 0.3 sec.
Rolling Start,	5-60 mph 5.9 sec
Top Speed (go	ov Itd) 107 mph
Braking, 70-0) mph 203 ft
Roadholding,	
300-ft Skidpa	ad 0.72 g
FPA Fuel Fcor	nomy

• Comb/City/Hwy 24/24/24 mpg

7.2 kilowatts of electricity to outlets in the bed [see "Power Play"].

Hybrid or not, the F-150 is much improved in terms of interior execution and materials, particularly on lower-level trims. Spec the Interior Work Surface and, with the truck in park, you can stow the shift lever flat in the center console, making room for a fold-out worktable that transforms the front row into an effective mobile office. The optional 12.0-inch digital gauge cluster is crisply rendered and easy to navigate. The standard 8.0-inch center touchscreen can be upgraded to a slick 12.0-inch unit. Both run Ford's Sync 4 infotainment software, which is capable of wireless connectivity and over-the-air updates.

The hybrid option can be had on any F-150 crew cab for a somewhat reasonable \$2500 to \$4495, depending on the trim level. That equates to base prices of \$42,840 to \$77,845. The gains that the setup provides in regard to fuel economy don't make this big pickup into a Prius, but they are considerable percentage-wise, and the system works seamlessly and demands very little compromise from F-150 buyers.

BUTCHER WAGON

We still love station wagons even though the buying public has largely abandoned them. Mercedes-Benz persists with its handsome example in the E-class line, but even Benz's iconic wagon is changing to meet an SUV-crazed market. For 2021, the E450 looks a bit less wagon-y and gains a tough-sounding All-Terrain name in hopes of attracting buyers who might otherwise choose an SUV.

But the E450 remains pretty much the car it was last year. Merc gave it a revised front fascia, some matte-black plastic cladding, and a couple of hood bulges. A new turbo 3.0-liter inline-six hides under those bulges. Buttery and rich with power, the engine makes 362 horses and 369 pound-feet of torque, with an electric motor

adding up to 21 horsepower at low rpm. This six has the same output as the old V-6, but the new engine makes the E450 quicker than its predecessor. A run to 60 falls in 4.4 seconds, and the All-Terrain hits the quarter-mile in 13.1.

The body rides 1.2 inches higher off the ground than before. Should you need more clearance, the four standard air springs can lift it an additional 0.8 inch. On broken roads, the All-Terrain felt jumpy, and it became unsettled on potholed on-ramps. Our test car wore optional 20-inch wheels and summer tires, which may have contributed to the harshness.

Inside, things look right. There's openpore wood trim and enough ambient lighting for a new-age cigar bar, and the heated and ventilated leather seats are comfortable and supportive. The two 12.3-inch screens that make up the media and instrument displays are standard this year and look appropriately high tech. We take issue with the overly sensitive touch controls on the steering wheel, though. They're all but impossible to use when the All-Terrain is in motion.

There wasn't much wrong with the old E-class wagon. Seeing its elegant lines blunted by plastic cladding and hood bulges upsets us. But if the costume tricks crossover shoppers into buying wagons, we're all for it.

THE NUMBERS

Vehicle Type: front-engine, all-wheel-drive, 7-passenger, 5-door wagon

Base\$	68,595
As Tested	87,635
Engine: turbocharged and	•
intercooled DOHC 24-valve i	nline-6,
aluminum block and head, d	lirect

fuel injection

Displacement 183 in³, 3000 cm³

Power 362 hp @ 6100 rpm

Torque 369 lb-ft @ 1600 rpm

Transmission: 9-speed automatic

Dimensions

Dimensions	
• Wheelbase	115.7 in
• L/W/H	194.8/73.7/58.9 in
• Curh Woight	1585 lh

TEST RESULTS









2021 DODGE DURANGO SRT HELLCAT ~ BY CONNOR HOFFMAN

Fun for the Whole Clowder

Highs: Insane power, great body control, the ultimate schlepper. Lows: Supercharger squeals even at low rpm, horrific mileage, not as refined as its German rivals.

For you and your kin to experience the full potential of the Durango SRT Hellcat—the most powerful three-row SUV in existence—line up at a stoplight, punch the launch-control button, and put all those hours spent on the Peloton into the brake pedal with your left foot and into the gas with your right. When the light goes green, release the brake and feel the snarling cat stitched on your seat press between your shoulder blades. It's unlikely to leave an imprint on your kids' backs, but you'll certainly imprint a love for acceleration into their minds.

Are 710 horsepower and 640 poundfeet of torque crazy for a three-row fam-

THE NUMBERS

Vehicle Type: front-engine, all-wheel-drive, 6-passenger, 4-door wagon

i door wagon	_
Base	\$82,490
As Tested	\$89,665
Engine: supercharged and	

Engine: supercharged and intercooled pushrod 16-valve V-8, iron block and aluminum heads, port fuel injection

TEST RESULTS

ILOI KESOLIS
60 mph 3.6 sec
100 mph 8.9 sec
1/4-Mile 12.0 sec @ 115 mph
130 mph 16.0 sec
150 mph 23.9 sec
Results above omit 1-ft rollout of 0.2 sec.
Rolling Start, 5-60 mph 4.2 sec
Top Speed (mfr's claim) 180 mph
Braking, 70-0 mph 165 ft
Braking, 100-0 mph 323 ft
Roadholding,
300-ft Skidpad 0.87 g
C/D Fuel Economy
• Observed 12 mpg
EPA Fuel Economy (C/D est)
• Comb/City/Hwy 13/11/17 mpg

ily hauler? Yes. Definitely. But SRT is all about crazy. The Durango is the fifth nameplate to receive the Hellcat V-8—further proof that the beast will work just about anywhere it fits. Use that power and 60 mph comes in 3.6 seconds. Hold your foot in it for 12.0 seconds and you'll cover a quarter-mile and reach 115 mph.

Traction plays a big role in 60-mph times, and the Durango's all-wheel-drive system helps make the most of it. That's how a 5534-pound SUV accelerates to 60 just a tenth of a second slower than the 797-hp Charger SRT Hellcat Redeye and two-tenths behind the 760-hp Ford Mustang Shelby GT500.

Speaking of traction, Dodge tunes the chassis to keep the engine's power in check. Hellcat Durangos benefit from a reworked suspension that most notably reduces body roll compared with the '20 SRT model. The Durango bends into corners and rings around cloverleafs with ease—think Derrick Henry in a yoga class. On the skidpad, the Dodge recorded 0.87 g of lateral grip with the \$595 Pirelli P Zero summer tires.

As if the blower whine weren't enough to warn other drivers that this SUV isn't the 475-hp Durango SRT 392, Dodge affixes plenty of Hellcat badges to the exterior. From the driver's seat, the supercharger whine is noticeable but more subdued than it is in the Challenger and Charger. The Hellcat shares its instrument panel and 10.1-inch touchscreen with the rest of the '21 Durango lineup. To help justify the fact that you're paying nearly three times the price of the base model for the Hellcat power, the cabin gets a flat-bottom steering wheel.

At \$89,665 as tested, this Durango is a relative bargain compared with the super-SUVs from Mercedes-AMG and BMW M and about the same price as Jeep's 707-hp Grand Cherokee Trackhawk. But none of those would look as good towing a Challenger SRT Demon to a drag strip as this Durango, which can haul 8700 pounds. Once you get to the strip, you might even run a few passes in it, too. Just remember to unhook the trailer and check the back seat for kids first.

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2021 GENESIS G80 2.5T ~ BY RICH CEPPOS

Becoming Genesis

Highs: Opulent interior, abundant features, brilliant price. Lows: Oversized cheese-grater grille, does anyone know what a Genesis is?

What's it take for people to readily associate a brand with luxury? Two things: compelling products and time. Hyundai has been selling cars in the U.S. under the Genesis brand since the 2017 model year, a mere blink relative to the tenures of upper-crust establishment marques like BMW, Audi, and Mercedes-Benz. It takes decades to build ironclad credibility and premium-brand heritage, so it will be a while before Genesis becomes a household name in this country's well-off enclaves. But the new G80 shows that Hyundai's aspiring luxury division already knows how to build the right car.

We spent several days with the second-gen G80 sedan and can confidently say it's a different automobile than the outgoing car. Built on Genesis's new M3 rear-wheel-drive architecture, the G80 measures one or two inches greater in wheelbase, length, and width than the mid-size luxury cars it's aimed at: the BMW 5-series, Audi A6, and Mercedes E-class. Genesis uses those extra inches to carve out an impressive amount of interior room; the G80 feels half a size class larger than the German trio.

The ambience is even more impressive. In top-spec Prestige form, the G80's cabin is stylish and beautifully crafted from premium materials. A strip of matte-finished wood sweeps cleanly across the dashboard, which is

topped with a 14.5-inch infotainment screen that, much like the car's dimensions, seems a half-size larger than the competition's. The front-door upholstery is sewn in a cool wave pattern that's repeated on the plush seats. As in the GV80 SUV, with which this sedan shares its architecture and design themes, the rotary shift knob and touchpad controller on the center console are knurled; ancillary controls have a satin-metal finish.

The G80 lineup offers three trim levels, rear- or all-wheel drive, and a choice of two engines—a 300-hp turbocharged 2.5-liter four or a 375-hp twin-turbo 3.5-liter V-6. Our rear-drive test car was equipped with the four-cylinder and the Prestige package, which loaded it with everything you'd expect to find in a luxury sedan—from a host of active safety driver assists to a 21-speaker

FOUR PLAY

In recent years, a quiet revolution has taken place under the hoods of luxury mid-size sedans: Four-cylinder engines have superseded sixes as the base powerplants. Several factors facilitated this change. Turbocharging enabled small fours to make enough torque to move two-ton vehicles with adequate gusto to satisfy buyers who formerly had a six up front. And engineers developed ways to combat the inherently buzzy character of the four-cylinder, with things like fluidfilled engine mounts, dual firewalls, advanced sound-deadening materials, and active noise cancellation. Which is why the new G80, like all its competitors, features a turbocharged four as its base engine. -RC

Volvo S90 T6 super- and turbocharged 2.0L

Genesis G80 2.5T turbocharged 2.5L 300 hp 311 lb-ft

turbocharged 2.0L
272 hp
280 lb-ft
Mercedes-Benz E350
turbocharged 2.0L

255 hp
273 lb-ft

Audi A6 45 TFSI
turbocharged 2.0L
248 hp
273 lb-ft

turbocharged 2.0L
248 hp
257 lb-ft

Jaguar XF 25t

BMW 530i

turbocharged 2.0L
246 hp
269 lb-ft
Cadillac CT5

turbocharged 2.0L 237 hp 258 lb-ft



THE NUMBERS

Vehicle Type: front-engine, rear-wheel-drive, 5-passenger, 4-door sedan

Base/As Tested \$48,725/\$58,025

• L/W/H 196.7/75.8/57.7 in • Curb Weight 4143 lb

TEST RESULTS

60 mph	5.7 sec
100 mph	14.1 sec
1/4-Mile	14.1 sec @ 100 mph
130 mph	26.0 sec
Results above omit 1-ft	rollout of 0.3 sec.
Rolling Start, 5-60	
Top Speed (C/D est)	145 mph
Braking, 70-0 mph	160 ft
Roadholding, 300-f	t Skidpad 0.91 g
C/D Fuel Economy	
Observed	19 mpg
EPA Fuel Economy	
• Comb/City/Hwy	26/23/32 mpg

Lexicon audio system. The Prestige package also includes Genesis's Ergo Motion adjustable driver's seat, which offers posture-correcting pulsating action plus something called "stretch mode." The latter feels like an unenthusiastic back rub from a significant other who'd rather be doomscrolling Twitter.

Massaging seats may be the only place where the German competition has a significant advantage over the G80, though. The Genesis drives about as well as the four-cylinder versions of its rivals. Its turbo four is muted at low speeds and provides more-than-ample thrust, delivering the 4143-pound sedan to 60 mph in 5.7 seconds. The eightspeed automatic's shifts are well coordinated. The handling is agile enough to be borderline engaging, and road shocks are damped out quietly. The G80 whispers down the road, registering 66 decibels at a 70-mph cruise—same as a Bentley Flying Spur.

Without gold-star brand equity to its name, the G80 needs something else to be alluring, and it has it: superb value. Its base price is \$48,725; our overstuffed test car was just \$58,025, thousands less than similarly equipped competitors. Lexus proved that, given time, this strategy can work. The G80 is a fine car just waiting for its reputation to catch up.

POWER HIKE

The Subaru Crosstrek has a more powerful engine option for 2021, but before you get too excited thinking that the company has swapped in the WRX's 268-hp turbo engine, we'll tell you that the upgrade is less ambitious.

Shared with the Legacy, the new-to-the-Crosstrek engine is a 182-hp 2.5-liter flat-four for the Sport and Limited trims. It has a significant 30-horse advantage over the carryover 2.0-liter and motivates the Crosstrek to 60 in 7.5 seconds, 1.6 seconds quicker than the base setup. The extra power is more satisfying underfoot, but the 2.5-liter sounds just as thrummy as the smaller flat-four. Unfortunately, the six-speed manual, which adds playfulness to the 2.0-liter ute, can't be paired to the 2.5, and the mandatory CVT intensifies its waffling drone under acceleration. Hammering the new engine during 10Best testing likely

contributed to the unimpressive 23 mpg we recorded, a major 4 mpg short of the Crosstrek's EPA city rating. We'd guess that you'll do better.

Aside from a new bumper, the rest of the Subaru is very familiar. It's still the automotive equivalent of that person who wears hiking boots all the time but has never seen a trail. Unlike the similarly sized Toyota C-HR, which doesn't look or act like the car it's based on, the Crosstrek is nothing more than a lifted Impreza costumed in larger tires and black cladding. This isn't necessarily a bad thing, because it means the Crosstrek handles much like its stablemate.

Despite some extra dressing on our \$31,440 Limited model, the interior's hard plastic is yet another reminder that the Crosstrek is at its core a lot like the basic \$20,220 Impreza. The Mazda CX-30 is richer inside, but for buyers who want a car with tacked-on SUV traits, the Crosstrek—with its reasonably potent new engine, 8.7 inches of ground clearance, and all-season tires that will work just fine on a two-track—is worth a test drive. But we're still hoping for the WRX version.

THE NUMBERS

Vehicle Type: front-engine, allwheel-drive, 5-passenger, 4-door hatchback

Engine: DOHC 16-valve flat-4, aluminum block and heads, direct fuel injection

Displacement 152 in³, 2498 cm³ **Power** 182 hp @ 5800 rpm **Torque** 176 lb-ft @ 4400 rpm **Transmission:** continuously variable automatic

Dimensions

• Wheelbase 104.9 in • L/W/H 176.5/71.0-71.7/63.6 in • Curb Weight 3351 lb

TEST RESULTS

4
60 mph 7.5 sec
1/4-Mile 16.0 sec @ 88 mph
100 mph 22.2 sec
Results above omit 1-ft rollout of 0.3 sec.
Rolling Start, 5-60 mph 8.2 sec
Top Speed (C/D est) 120 mph
Braking, 70-0 mph 169 ft
Roadholding,
300-ft Skidpad 0.81 g
C/D Fuel Economy
• Observed 23 mpg
EPA Fuel Economy
 Comb/City/Hwy 29/27/34 mpg





2021 TOYOTA SIENNA AWD ~ BY ERIC STAFFORD

The Prius of Minivans

Highs: Aggressive looks, improved refinement and road manners, good fuel economy. Lows: Hybrid powertrain hurts acceleration, second-row captain's chairs cannot be removed.

The 2021 Toyota Sienna wants to change how we look at minivans. To combat the kiddie-hauler stigma, Toyota dressed the Sienna more like an SUV, giving it a boxier front end with a taller hood. Curves and bulges along the sides and a massive grille give the van an almost aggressive look. But the biggest change lurks under the skin, as the Sienna is now a hybrid.

A 2.5-liter inline-four coupled to two electric motors takes the place of the outgoing 296-hp 3.5-liter V-6. The combo churns out 245 horsepower in front- or all-wheel-drive form. Our all-wheel-drive test van got to 60 in 7.7 seconds, nearly a second slower than the old V-6. But the instant torque of the electric motors brings a nice punch just above idle. Sufficiently charged, the battery allows electric driving for short distances at low speeds, but customers are likely to care more about the Sienna's fuel economy and how the hybrid system can stretch a gallon.

THE NUMBERS

Vehicle Type: front-engine, all-wheel-drive, 7-passenger, 4-door van Base/As Tested \$37,635/\$53,550 Powertrain: DOHC 16-valve 2.5-liter inline-4, 189 hp, 176 lb-ft; 2 permanent-magnet synchronous AC front motors, 180 hp, 199 lb-ft; 1 permanent-magnet synchronous AC mid-motor, 54 hp, 89 lb-ft; 1.9-kWh nickel-metal hydride battery pack; combined output, 245 hp Transmission: continuously variable automatic

Dimensions

Pillicipions	
Wheelbase	120.5 in
	203.7/78.5/68.5 in
• Curh Woight	/1821 lh

TEST RESULTS

60 mph 7.7 sec
1/4-Mile 15.8 sec @ 88 mph
100 mph 21.0 sec
Results above omit 1-ft rollout of 0.3 sec.
Rolling Start, 5-60 mph 8.7 sec
Top Speed (gov ltd) 116 mph
Braking, 70-0 mph 188 ft
Roadholding, 300-ft Skidpad 0.79 g
C/D Fuel Economy
Observed
EPA Fuel Economy
• Comb/City/Hwy 35/35/36 mpg

The old van with front-wheel drive was rated at 19 mpg in the city and 27 on the highway. The EPA says the new one, in front-drive form, hits 36 mpg in either environment. Under the strain of our full-throttle ways, our all-wheel-drive test van returned 29 mpg.

Like before, the Sienna will tow up to 3500 pounds and all-wheel drive remains an option, but instead of using a driveshaft to transfer torque to the tail, an electric motor powers the rear axle. Toyota hides the 1.9-kWh nickel-metal hydride battery under the front seats to avoid compromising cargo space, but storage room behind the second and third rows is down 12 and five cubic feet, respectively. You can no longer remove the second-row captain's chairs because they contain side-impact airbags. They do slide farther fore and aft than before, though. And in the front row, you'll find practical storage space below a bridgelike floating center console.

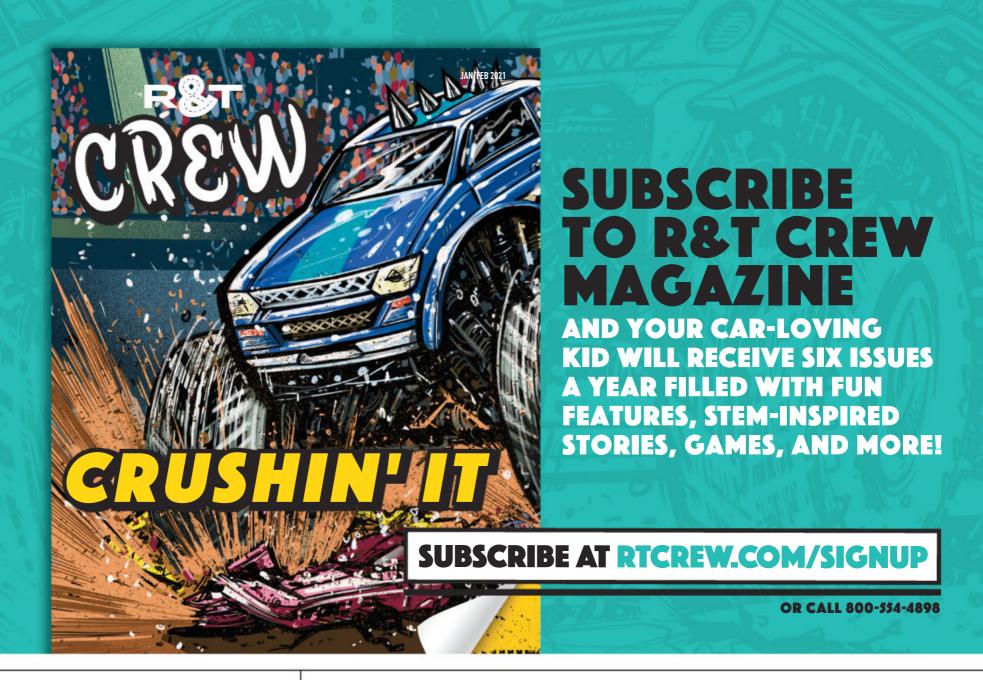
There's comfortable seating for seven with the captain's chairs or eight with the stowable second-row center seat. Legroom has increased in the back rows, too. Juggling kids and groceries? The new Sienna makes things easy for you with sliding doors that open if you wave a foot under the rocker panel.

The bare-bones front-drive Sienna LE starts at \$35,635, about \$3000 more than the '20 model. A fully loaded all-wheel-drive Platinum model, such as our test vehicle, stickers for \$53,550. Although the Sienna's new design probably won't change the public's perception of minivans as much as Toyota's marketing department hopes, the folks who buy one will enjoy its impressive-for-a-minivan fuel economy, its comfortable and spacious cabin, and its edgier appearance.

80 THE RUNDOWN

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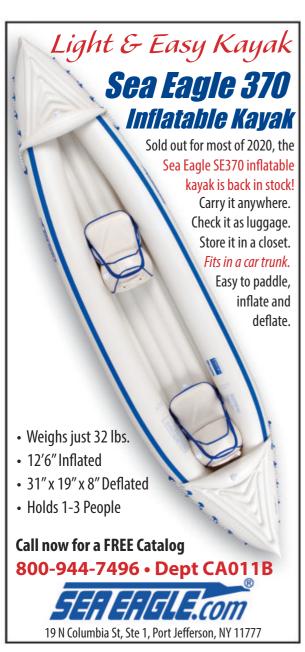
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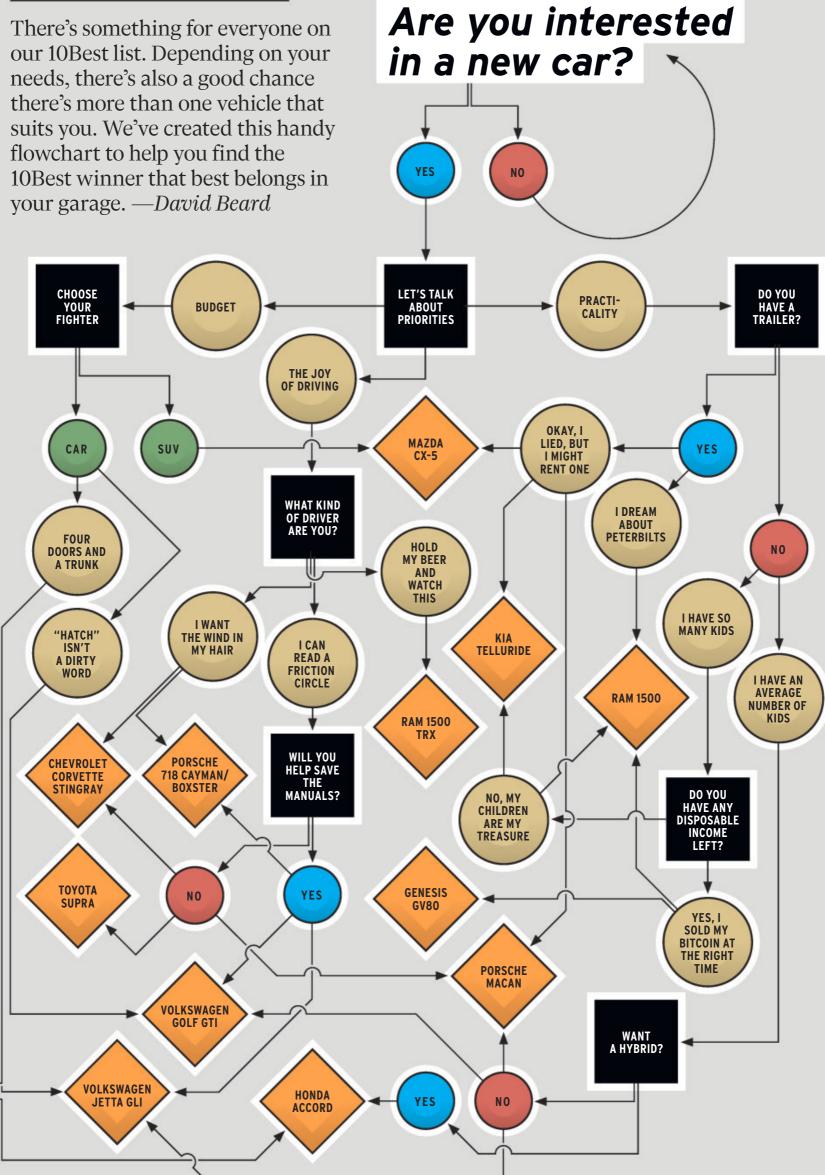
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